Clinical Lectures ON TUBERCULOUS DISEASE OF THE BONES.

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LECTURE II.

GENTLEMEN,—I have another case I must bring to your notice before proceeding to consider the more general questions concerning tuberculous disease of the bones. You may remember last September seeing a little girl (G. W——), aged six, in the Chadwick ward, suffering from angular curvature of the spine and a large pelvic abscess connected with diseased vertebræ. After death we found that the bodies of several of the dorsal vertebræ were in a condition which is commonly described as "fungating caries"; but I may here observe that I have examined a considerable number of these cases, and discovered evidence of tubercle in the cancellated structure of the diseased bone. Dr. Burdon-Sanderson's remark, however, with reference to tubercle in the lymphatic glands, is equally applicable to bone: that, however fine the sections may be, they show absolutely nothing of the abnormal structure, "unless the tissue to be examined is first prepared by soaking in a solution of chromic acid and subsequently brushing away the superfluous cell-growth." On making sections through these vertebræ, we find that in places the contents of the cancellated tissue are of a deep crimson colour, especially along their anterior free surface, where the bone has been partially destroyed, and presents a soft, florid (granulating?) appearance. On examining specimens of the material contained in the diseased cancellated tissue, we find that it is composed of precisely the same fibro-cellular growth I have described in my last lecture as characteristic of tubercle, and that by far the greater part of the medulla in these bones has been replaced by a similar formation; in fact, the cancellated structures of these vertebræ are choked by a lowly organised fibro-cellular growth, which towards the anterior surface of the bone has degenerated, and the disintegrated osseous tissue, together with the remains of the structures through which it has passed, have penetrated along the line of least resistance, and so reached the right groin. But you will observe that in this instance, as in the case of H. T——, no new bone has been formed in or around the seat of the disease, perhaps for the simple reason that tubercle having replaced the medulla, none of the original embryonic elements are left from which new bone could have been produced. This case therefore differs essentially from one of ordinary inflammation, in which, unless the abnormal action has run a peculiarly rapid course (as in acute osteo myelitis), the increased energy manifested by the cells contained in the medulla results in the formation of new bone, by means of which a limiting membrane, if we may so call it, is formed round the focus of the disease. In tubercular affections there is but little chance of any such conservative action, for not only are the normal elements of the medulla destroyed, but the healthy medulla, which we know in the greater number of cases surrounds the diseased tissue, fails to throw out new bone, until the tubercle has completely degenerated, and been removed either by nature or by the hand of the surgeon. The rough treatment which a bone receives under these latter circumstances is very different from the insidious action of a parasitic growth such as tubercle, which seems to destroy the tissues among which it grows by appropriating their nutritive fluid to its own purposes. In consequence, however, of this want of energy in the bone-producing elements around tubercular formations, the products of the disintegrating tubercle are scattered principally in the direction of the nutritive current, and so living particles of tubercle are often swept towards the subcartilaginous layer of bone; they take root and grow; the processes leading from the cancellated tissue to the articular cartilages become blocked, the latter structure atrophies, and so joint complications arise; in the mean time the tubercle continues to grow, the tissues around it crumble away, liquefaction of the tubercle follows, and the matter, in obedience to gravity, travels along the path of least resistance, thus reaching the surface of the body, or it may be penetrating into a neighbouring joint.

Observe, beyond the fact of there being no new bone formed in these cases of diseased vertebræ (and the same remark applies to all the specimens I have shown you), the trabeculæ in the cancellated tissue are not rendered denser (sclerosed), as they are in instances of chronic inflammation of bone. This is one of the broad and characteristic features between tuberculous specimens of bone and those resulting from inflammation. In the latter, from the nature of the abnormal action going on in the part, sclerosis of the bone occurs to a greater or less degree, whereas in tubercle of bone the trabeculæ, in place of becoming denser, are generally unaltered, or, if changed, become more spongy than in health. I have explained the reason of this to you, and I lay stress on the point because it is argued that the condition of the medulla I have described as due to tubercle may be the result of chronic inflammation, and the cell-growth simply granulation-tissue. I say no. If granulation-tissue cannot be distinguished from tubercle under the microscope, nevertheless the condition of the surrounding parts which results from these forms of disease is very different, and enables us to diagnose the one from the other.

You may notice that in this case the intervertebral discs look healthy, notwithstanding the extensive disease of the bones above and below them, and this is the condition of the discs in all the cases of tuberculous disease I have had the opportunity of examining. You are aware that the centre of the intervertebral discs, until the adult period of life, is soft and cellular, but in this case the surrounding cartilage-cells and their stroma are quite normal in character. The trabeculæ of bone, as I told you on a former occasion, contain embryo cartilage nuclei, and it is interesting to notice that in the course of the disease we are studying, up to its very latest stages, the cartilage and trabeculæ, formed from a common source, effectually resist the progress of tubercle; they may, and do, waste away, or become atrophied, in consequence of their nutritive fluid being interfered with, but the bone and cartilage corpuscles seem to take, at any rate, no active part in the disease; they have, perhaps, but little affinity for tubercle, affording us an example, though not a perfect one, of a series of changes which seem to point to the fact that definite elements of the body, derived, probably, from the same germinal base, are alone immediately affected by certain specific diseases, such as syphilis and tubercle. We may form some idea of this action by watching the growth of fungi which only attack particular vegetables or fruits. The analogy in the case we are considering is not, however, complete, for we know that the medulla, among other elements, contains the remains of embryo cartilage-cells (THE LANCET, 1876, p. 568); and if in the trabeculæ and articular cartilage these cells resist the attack of tubercle, it is not easy to understand what becomes of those contained in the medulla unless they are destroyed in the growth of the tubercle, which, as I before remarked, does not consist in inflammation of the elementary structures in the affected parts. Tubercle is a growth which, as it increases in volume, chokes the life-preserving elements of the surrounding tissues, and by a somewhat similar process its own elements are ultimately destroyed.

With reference to the idea that the affection I have described as tuberculosis of bone is a constitutional disease as distinguished from a local one, I may observe that the clinical history of a large proportion of these cases gives us clear evidence as to the patients having been members of a phthisical family, or that some of their near relations had suffered from tuberculosis. Then, again, how often we meet with instances of disease of this description commencing in one bone, and before long appearing in a neighbouring bone, separated, perhaps, from the original focus of disease by a joint. The abnormal action in these cases does not extend through continuity of tissue, but probably from the fact that the first manifestation of the

disease had been engendered as the result of some cause or other which interfered with the nutrition of structures prone to develop tubercle. The disease having once become established, chronic hyperæmia occurs in the part, and so the nutritive process in neighbouring tissues is interfered with, and the growth of tubercle in parts near the starting-point of the disease is the result. This idea rather leads us to assume that in these cases the cytogenous connective tissue at the seat of the disease, and probably in other parts of the body, is prone to tubercle, in consequence of inherited tendencies. It simply requires some slight extraneous agency to act on this structure to set latent forces at work leading to the formation of tubercle, which too commonly continues to grow until it has destroyed the tissue it first manifested itself in. The notion that these affections depend on constitutional disease is also strengthened by the fact that in countries such as Hindostan, where phthisis is not so common as it is among the inhabitants of Europe, scrofulous diseases of bone are less frequently seen. I hardly remember meeting with a case of scrofulous disease of the bodies of the vertebræ in a native of Bengal, and Sir J. Fayrer, writing to me on this subject, remarks: "Strumous disease of the bone is less common in the natives of India than in those of this country. Joint operations are consequently less frequent also, but I can recall cases of hip, elbow, and ankle, and also of tarsal and the ends of the long bones, in which it existed. Far less, though, I think, than here." By the same reasoning it seems doubtful if the affection of the bones we are considering depends on a syphilitic diathesis, because this latter disease is widely diffused among all classes in India; but, as I have above remarked, scrofulous affections of the bones are not common among these people.

On the other hand, it is argued that the cases are so numerous in which molecular disintegration is limited to a single bone, and often to only a small portion of that bone, that it seems hardly possible to suppose the disease can depend on constitutional defects; it is further with truth asserted that the removal of the local manifestation of disease of this kind appears frequently to put an end to the abnormal process—the patient is, in fact, cured by taking away the diseased tissues. In answer to this, I think that, for instance, in excising a diseased knee-joint (scrofulous), we do little more than remove the palpable effects of disease; it is quite impossible to assert that in even the majority of cases so treated the diseased structures are entirely excised, for it seems most certain that in cases of scrofulous children certain tissues throughout the body are very liable to be invaded by tubercle; in one instance, in consequence of faulty surroundings, the lungs become involved, in another the osseous tissue, and so on. In fact, as with individuals, so with their tissues, the weak or susceptible parts most readily fall victims to deleterious influences. There must be degrees of healthiness, however, even in the tissues of phthisical people, and so those tissues most prone to tuberculous disease in scrofulous subjects pass into decay, but it does not follow that the remaining structures are healthy. The surgeon may remove parts that are evidently rotten, and the result is beneficial—precisely what we should have anticipated in the case of constitutional disease, because the traumatic injury done to the tissues produces a new, and in this instance a conservative, action in them; and further, anything which tends to lower the patient's general health, such as the irritation and discharge from a diseased bone, if excised must be advantageous; and unquestionably by removing local disease, and thus perhaps enabling a weakly patient to take out-door exercise and breathe fresh air, we greatly improve his prospects of recovering health and strength, and so diminish the further tendency he has to develop tubercle. These considerations are of importance, for it is not by simply studying the anatomical and pathological changes which have occurred in dead specimens that we shall gain a thorough knowledge of the circumstances of tuberculous disease of bone; we are evidently also bound to exercise our minds upon the conditions which influence its progress during life, and none of these are of greater importance than the fact of tubercle being a constitutional disease, depending therefore greatly upon hereditary and hygienic imperfections for its development and growth.

That chronic inflammation of bone may occur independently of tubercle is a fact well known to every surgeon; but because this is the case it is hardly correct to argue that tuberculous disease of bone is a rare affection. We do not know why tubercle should more frequently occur in the lymph-glands of children than of adult persons, but such is the case; and so it is with the medulla of bone, and if in the class of cases I have described we search for tubercle in this tissue we shall, unless I am much mistaken, not unfrequently find it there.

OPHTHALMOLOGY IN ITS RELATION TO GENERAL MEDICINE.

Abstract of the Annual Oration delivered before the Medical Society of London,

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I CANNOT find appropriate words to express how much I feel the honour of being asked to give the annual oration before the Medical Society of London. After all, the best return I can make is not to waste your time in a fruitless endeavour, but to begin my real task at once.

The subject chosen for this address is one which interests me more deeply than any other whatever. It is on the bearing of a very special department of medicine on general medicine. I wish to show how we have profited and may profit by what ophthalmic surgeons have done in their special fields of work. I think it the luckiest thing in my medical life that I began the scientific study of my profession at an ophthalmic hospital.

Before taking up any particular topic, I must point out the debt which those of us who are not ophthalmic surgeons owe to Dr. John W. Ogle; he was the first physician in this country to use the ophthalmoscope in medical cases. Next, I must mention the work done by Dr. Clifford Allbutt in medical ophthalmology; his work, "The Ophthalmoscope in Nervous and Renal Diseases," is of inestimable value to physicians.

I can speak of only one of the superficial affections of the eye—interstitial keratitis. This, before Hutchinson's researches, was supposed to be a manifestation of strumæ. He has shown that it is a certain proof of congenital syphilis. It usually goes along with a particular dental malformation, which, as he has shown, too, is evidence equally certain and practically more often available. This important double discovery could scarcely have been made except at an ophthalmic hospital, since the cases are rare and are only met with in numbers at a large ophthalmic hospital. Here is a great debt we owe to one I would call an ophthalmic surgeon, were he not distinguished by having done good work in other departments of surgery. Having in the corneal and dental peculiarities a certain warrant for the diagnosis of congenital syphilis, we can study its doings in other organs. In investigations of diseases of the nervous system, I have profited very largely in the diagnosis and therapeutics of non-ocular disease from these tests of inherited syphilitic taint.

Passing over numerous other important organic affections, I will speak of anomalies of refraction. It is exceedingly important that the physician should study anomalies of refraction and their indirect effects. I do not mean that it is necessary for him to have that familiar knowledge which the ophthalmic surgeon must have, but, for general medical purposes, he should be able to diagnose them. I use the word physician, not in its conventional sense, but as a brief name for all who are practising in medicine. It is not necessary that the physician should be able to cut for stone, but it is needful that he should be able to diagnose or to suspect vesical calculus, or he will subject his patient to a long course of inefficient treatment. A knowledge of the indirect effects of anomalies of refraction would, doubtless, save us from serious misinterpretations of symptoms. Brudenell Carter records the case of a patient who came complaining of "periodical confusion of vision." He worked at an office commanding a view of a large clock on the other

side of the courtyard; he could see the hands of the clock when they were approximately vertical, but lost them when they were approximately horizontal. Such a case would be inexplicable without ophthalmological knowledge. Mr. Carter diagnosed astigmatism and found it.

In some cases of abnormal refraction there is a simulation of brain-disease, or, at any rate, patients who only want appropriate glasses are occasionally treated by physicians for brain disease. I have been speaking of hypermetropia, but the remark applies to other abnormalities of refraction.

Brudenell Carter has reported a remarkable case of myopia simulating brain disease in the eighth volume of the Clinical Society's Transactions. This report should be carefully studied by physicians. The patient, for supposed brain-trouble, took a voyage to Australia, but was no better for it. He was told that "he must abandon the idea of carrying on the family business, or of taking any active part in life." This patient was immediately, thoroughly, and permanently cured by the adoption of appropriate glasses. The possibility of an anomaly of refraction or any eye defect being at the bottom of that patient's troubles seems not to have occurred either to himself or to his doctors. He did not consult Mr. Carter for any defect of sight, but because he had heard that ophthalmic surgeons had an instrument useful in the investigation of disease of the brain. I could relate cases of hypermetropia in which the diagnosis of brain disease had been made by physicians and refuted by ophthalmic surgeons. Here is one. A medical student, twenty-one years of age, had been obliged to give up his work because reading brought on attacks of vomiting and frontal headache. The vision of each eye for near and distant objects seemed good to ordinary examination, and there were no ophthalmoscopical changes, except some dilatation of retinal veins. To cut a long story short, after travelling about two years, doing nothing towards his career, Mr. Tweedy, in May last, fitted him with a pair of spectacles, remedying hypermetropia and astigmatism. The patient has been well ever since; has returned to his medical career, and has graduated at the University of London.

There is another thing in connexion with hypermetropia which deserves the attention of physicians. Mr. Couper has found that in some cases of hypermetropia the optic discs, in consequence of over-use of the eyes, become reddened and even swollen. The redness and swelling may, he tells me so marked that this comparatively unimportant condition, remediable by spectacles, is occasionally mistaken for and treated as slight neuritis depending on cerebral disease. The true explanation of these cases was given by Mr. Couper in a paper read before the Hunterian Society in 1870. In hypermetropia, the strain on accommodation is great; and thus there is not only congestion of the disc, but œdema also. The degree of the swelling may be approximately determined by the ophthalmoscope. Besides its very obvious direct interest, this fact has an important indirect bearing. The congestion and œdema from overwork of the hypermetropic eye seem to me to throw light on cases in which functional abuse leads to paralysis — on cases of writers' cramp, for instance, which is really a mixture of paralysis and spasm. In such cases, there is not a single fact as to the morbid anatomy; hence all our so-called pathological knowledge of them can only be hypothetical; in ophthalmic practice we can see the effects of overwork in producing a morbid state, not, it is true, of a nerve-centre, but of a nerve-periphery. I believe it to be a reasonable inference that in the centres overworked during prolonged writing there is induced a pathological state analogous to that in the over-worked hypermetropic eye, and that it leads to imperfect function of those centres, just as in some of Mr. Couper's cases there resulted diminish acuteness of the retina. Mr. Couper's researches seem to me important, also, as bearing on one way in which congestion of the brain results. As overwork of the eye causes congestion and œdema of the optic disc, so overwork of the brain causes congestion and even possibly œdema of the brain. I believe it produces arterial fatigue, and thus loss of arterial tonus.

Paralysis of ocular muscle.—The patient who has paralysis, or paresis, of an ocular muscle or muscles, does not always come complaining of double vision, but sometimes for giddiness and irregularity of gait, or for confusion of sight. In cases of sight weakness of the external rectus, or when the superior oblique is the muscle paralysed, the palsy is by no means obtrusive; there is no ordinary strabismus; and in such a case the giddiness may be with fallacious ease attributed to some central lesion, to disease of the cerebellum for example; or it may even be put down to disease or temporary disorder of a part of the body so distant as the liver. Even when ocular palsy is obtrusive, as when the sixth nerve is completely paralysed, it may happen that the attendant vertigo is erroneously put down, not to that palsy itself, but to some supposed *additional* lesion of a nervous centre. This is attributing a symptom to a complex state of things, from overlooking a simple and obvious cause. In any case of vertigo having excluded obvious possible causes, we should not be content with an ordinary examination of the movements of the eyeball, but should test the patient by coloured glasses and candle in a darkened room.

Apart from the evident clinical value of the fact that ocular paralysis causes vertigo, the cases help us to a demonstration of the physiology of vertigo, and again to a knowledge of the state of things in disorder of co-ordination. To study the nature of vertigo, we must take a very simple case.

The simplest ocular palsy we can study for this purpose is that of the external rectus muscle.

Let us remark, first of all, that the vertigo occurring with this, or any other variety of ocular palsy, is *not* owing to diplopia, as it is very often supposed to be. It is owing to an erroneous estimate of the position of objects by the one eye which is lamed. This can be proved by a very simple experiment. In a case of palsy of the right external rectus, the patient (his left eye being closed), when told to strike quickly an object held to the right of the middle line, strikes beyond the object. When the patient tries to turn the eye outwards, Helmholz says: "The organ no longer obeys the will; it stops midway, and objects *appear to displace themselves to the right, while the eye and the retinal images produced there do not change position.*"

The patient judges of the position of the external object by the effort he makes to bring the eye to bear on it, not by the movement really accomplished. He judges, to use the language of Bain, by the "outgoing current"—*out-going*, but, be it observed, not muscle *reaching*. The eye does not, or, to use Helmholz's expression again, the retinal images do not, change position. In still other words, he judges by the activity of the centre for the movement. Thus, to speak metaphorically, *the hand is misinformed* as to the position of the object, and, therefore, strikes beyond the object; or, we may say, if so incoherent a simile can be excused, "the hand makes a false step." It is not difficult to understand how a similar dis-harmony betwixt the ocular and wider locomotor movements can cause vertigo or actual reeling. During walking, there would be many real "false steps," from acting on the untrustworthy estimates of positions given by the centre for the impossible movement of the paralysed ocular muscle. Even in the simple experiment just mentioned, the patient will sometimes not only miss the object on his right, but will actually *stumble* to that side.

These facts appear to me to demonstrate that vertigo is, physically considered, a *motor* symptom, as Russell Reynolds has long ago asserted, and not a sensory symptom, as it is commonly supposed to be. Further, study of ocular paralyses shows that vertigo is, on its physical side, rudimentary disorder of co-ordination. It is, I submit, inaccurate to assert—in a case of disease of the cerebellum, for example—that vertigo *causes* disorder of co-ordination; it is, itself, on the physical side, disorder of co-ordination. In this opinion I am glad to be able to say that Ferrier agrees with me. The only difference betwixt vertigo without outward manifestation and vertigo with the outward manifestation of a reel is one of degree; in one there are slight central changes, and in the other strong central changes, leading to peripheral effects. The difference is, I think, strictly analogous to the physiological difference betwixt speaking internally and externally; there is only a difference in strength of the central excitations or discharges. In no case of vertigo from paralysis of an ocular muscle can there be peripheral effect on that muscle, but, as will be mentioned later, there is a development of movements of associated muscles. Here I may refer to an experiment of Hering's, which is accepted by Dondere and Helmholz, to the effect that a closed eye

helps to determine the sense of direction. Thus ocular vertigo is doubtless due to strong energising of a centre for conjoined movement of the paralysed external rectus and the internal rectus of the other eye.

Considering the extreme simplicity of the facts ophthalmic surgeons have supplied us with, it is surely somewhat perverse to study the more difficult cases of auditory vertigo, and the most difficult case of epileptic vertigo, before we have studied ocular vertigo. We can make a patient, who has complete paralysis of the third nerve, giddy and reeling, when we like. We have only to make him close his sound eye, and keep the paralysed lid upheld by a piece of sticking-plaster, and let him walk; he tells us that he feels giddy, and we see him reel more or less. Starting here, we next investigate, with more hope of success, auditory vertigo.

It is a very interesting fact, that Cyon has found that experimental irritation of the semicircular canals produces ocular deviation, each canal its own deviation. And Ferrier finds that irritation of what he calls the auditory centre, in the cerebrum of the monkey, produces movements of the eyes to the opposite side, with dilatation of the pupil. These facts are very significant, and enforce what has been said as to the desirability of making ocular vertigo the starting-point of our investigations into vertigo in general. As to epileptic vertigo, the demonstration that vertigo is a motor symptom is of vast importance; for it helps to show a real relationship betwixt epileptic vertigo and convulsion; it shows that epileptic vertigo is, not only clinically, but physiologically, a minor degree of convulsion. Here we must note the distinction betwixt a mental state and a nervous state. There is no relationship whatever possible betwixt epileptic vertigo, considered, as it commonly is, chiefly as a defect or loss of consciousness, and convulsion; but there is one betwixt convulsion of the eyes or discharge of the ocular motor centre (the physical side of epileptic vertigo) and general convulsion. Moreover, Hitzig's experiments on passing galvanic currents through the head show that there are all degrees, from a feeling of vertigo only (that is, with weak central discharge only) to vertigo with actual turning to one side—that is, with central discharges strong enough to produce peripheral effects; there are similar degrees in epilepsy.

There are still other valuable deductions to be made from the facts of cases of ocular palsy. In a case of paresis of the right external rectus, when the patient tries hard to turn the lamed eye out, the other eye turns in too much; there is secondary deviation. From the attempt to move the paralysed or weak part, there is *a double effect;* there is, firstly, failure to move it, and, secondly, overmovement of associated muscles.

Later on, we shall see that there is evidence, both by cases of disease of the brain and by Ferrier's experiments, that there are, as has already been said, centres for conjoint movements of both eyes. This principle of double effects in cases of paralysis bears in a most important way on the interpretation of locomotor ataxy and of disorders of co-ordination in general. It has already been applied by Wundt to explain the disorder of co-ordination produced by experiments on animals; but, as far as I know, it has not been yet applied by physicians to explain cases of disorder of co-ordination by disease. I do not, however, maintain that in locomotor ataxy there is solely a motor difficulty; there is sensory defect, and the joints and bones even become diseased. Generally speaking, the principle is that, when a centre discharges and when one route for the current is stopped, the current, so to speak, overflows in other channels, in those for associated movements; it cannot produce the movement intended and it over-produces the associated movement. [The principle was illustrated by the phenomena of the gait in locomotor ataxy.]

Paralysis of ocular movements from disease of nerve-centres.—The physician often sees cases of palsies of ocular muscles, or rather paralysis of certain ocular movements, from disease of nerve-centres. Let us suppose that the right corpus striatum is extensively damaged: there will be left hemiplegia, and for some hours or days the two eyes turn to the right.[1] The head often turns in the same direction. The eyes and head turn to the right side for the same reason that the face does. The turning in all three is from the side paralysed, and therefore towards the side of the brain injured. There is no strabismus, for the eyes, although turned to one side, remain parallel. The implied healthy nervous arrangements for this lateral movement of the two eyes have been likened by M. Foville fils to the arrangement of reins for driving two horses. What occurs in the lateral deviation is analogous to dropping one rein (the right one, we will suppose), then the heads of the horses (supposing the left rein to be, so to speak, in tone) turn to the left.

There is clear evidence that this movement of turning the two eyes to one side is represented still higher even than the corpus striatum. I have long believed that ocular, and indeed all other movements, are represented in the cerebral convolutions: if they are not, the occurrence of convulsion from disease of them is unintelligible; without such a constitution of ideational centres, and certainly unless ocular movements are therein represented, what is often called the physiology of mind is, I think, an impossible science. Hitzig and Ferrier's experiments show, it seems to me, that movements are represented in at least some of the convolutions. For many years I have believed that every part of the nervous system is made up of nothing else than of nervous arrangements representing impressions and movements.

In Hitzig's and Ferrier's experiments the centres are stimulated; in the "experiment by disease," of which I have been speaking, there is destruction. Ferrier finds that stimulation in three parts of the cortex cerebri produces movements of the eyes. I have already mentioned that he finds lateral movement of the two eyes from stimulation of what he calls the auditory centre; he finds, too, that irritation of the visual centre—the angular gyrus—produces lateral movements of the two eyes in an upward or downward direction, according to the particular part of the gyrus stimulated. He concludes, and I think reasonably, that in both these cases the primary irritation is of sensory fibres representing the auditory and retinal expansions, and that the associated ocular movements result from a propagated irritation to what he calls the special motor centre for ocular movements. This special centre is situated at the hinder part of the superior and middle frontal convolutions. Stimulation on the right side causes the two eyes to turn to the left, and at the same time there is dilatation of the pupils. I have seen him produce this movement, well defined, exactly according to his prediction made before applying the electrodes. This active turning of the eyes, to renew an old illustration, is like pulling the right rein which goes to the right sides of the two horses' heads. It is just what one finds in cases of epileptiform convulsions, due to, at any rate connected with, lesions of the cortex cerebri by disease. Ferrier is able to produce a convulsion by experimentally irritating the surface of the cerebrum, closely like that resulting from the discharge of that part in disease.

It is to destructive lesion in some part of what Ferrier calls the special centre for the movements of the eyes that I should attribute the loss of lateral movements in some cases recorded by Priestley Smith. Priestley Smith has recorded cases in which loss of the lateral movement of the two eyes was the sole paralytic symptom. Such a symptom of necessity points away from lesion of nerve-trunks, and to a lesion of nerve-centres; that centre might be the pons Varolii or cerebellum; but the most likely seat is, I think, Ferrier's special centre[2]. At one time I did not believe that destruction of parts of the cortex produced local paralysis, but Ferrier's experiments on monkeys go contrary to this opinion. It has been recently found by Charcot and others, exactly in confirmation of Ferrier's experiments on monkeys, that from destructive lesions of certain parts of the cortex there occur limited palsies, as of the face, of the arm; and as Charcot finds post mortem wasting of fibres "descending" from the parts of the cortex destroyed, the cases must, I think, be admitted as conclusive. The most likely explanation of some of Priestley Smith's cases is, that there is a monoplegia, to use the French term, comparing with other monoplegias, such as paralysis of an arm only, or the face only, in the cases of cortical lesions described by Charcot.

Ferrier finds that very definite ocular movements result from stimulation of different parts of the cerebellum. It

[1] This was first pointed out by Vulpian and Prevost, Humphry, Hutchinson, Lockhart Clarke, Russell Reynolds, and Broadbent.

[2] Priestley Smith has just published a paper on Double Vision in the "Birmingham Medical Review," highly deserving the attention of physicians.

has long appeared to me probable that, whilst the cerebrum represents the ocular muscles in complex combinations for parallel movements of the eyes, by which we estimate superficial size and shape, the cerebellum represents the movements for the estimation of depth of bodies and of space (distance).

It interests me greatly that Priestley Smith has recorded a case in which, with loss of power to look to one side, convergence was intact. For this shows, by another kind of evidence, that parallel movements and convergent movements are, at any rate, separately represented. It does not, of course, follow from this that the convergent movements are represented in the cerebellum. However, Ferrier has been unable to produce convergence by stimulation of any part of the cerebrum; but he suggests that convergence might result were we to be able to stimulate simultaneously the special motor centre for the eyes in each cerebral hemisphere.

The clinical researches of Vulpian and Prevost, the experimental researches of Ferrier, and the ophthalmological researches of Priestley Smith, all seem to me to harmonise. Here is one common field for work by physicians, ophthalmic surgeons, and physiologists.

Leaving now the consideration of paralytic affections of the eyes from central disease occurring with other specially associated motor symptoms, we pass to sensory affection of the eyes with other specially associated sensory symptoms. We first note that there is a sensory symptom—hemiopia, which is the strict analogue of the motor symptom, lateral deviation of the eyes. This sometimes occurs with hemiplegia, and with that kind in which there is great defect of sensation. What is more to the point, it occurs in some cases where there is one-sided defect of sensation without discoverable paralysis. In all the cases of hemiopia I have yet seen, the disposition has been that the patient had lost power to see to the side on which his body was anæsthetic or dysæsthetic, just as in the analogous motor cases of lateral deviation of the eyes the patient has always lost power to look to the side on which he was paralysed.

I next speak of certain disorders of vision which the physician sees much oftener than the ophthalmic surgeon. Besides losses of sight, there are frequently seen cases of development of visual sensations. We saw that there was a mobile counterpart to hemiplegia in unilateral spasm with spasmodic lateral turning of the eyes to the side convulsed; so there is a mobile counterpart of the one-sided sensory disorder with hemiopia. In some cases of migraine, as Latham and Liveing have told us, there is a development of retinal sensations to one side along with pricking, formication, &c., of the limbs of that side. This is the sensory analogue of spasmodic turning of the two eyes to the side convulsed in unilateral epileptiform seizures. In the one there is discharge of convolutions in connexion with the corpus striatum, in the other there is, I think, discharge of convolutions in connexion with the thalamus opticus. Both are, I think, epilepsies in the sense that they are owing to "discharging lesions" of some part of the cortex cerebri, although of different parts of the cortex. In cases of paroxysmal sensation development, as well as in cases of motor development (epileptiform convulsion), we shall profit very largely by Ferrier's researches. It seems to me that all clinical evidence points to the region of the optic thalamus as the seat of the discharging lesion in migraine with visual phenomena. Latham thinks that the paroxysm of migraine is owing to arterial contraction in the region of the posterior cerebral. Liveing thinks that there is in the paroxysm a "nerve-storm" traversing the optic thalamus and other centres. Ferrier's experiments, if not decisive, supply the only physiological evidence there is as to the cerebral locality where retinal impressions are specially represented. It is true that, in monkeys, he finds that extirpation of the angular gyrus is followed, not by hemiopia, but by loss of sight of the opposite eye; his conclusions are endorsed by Charcot from clinical evidence. Hence I freely admit that there is a want of harmony betwixt present clinical investigations and physiological experiments. What, however, I would urge, is careful attention to Ferrier's researches in this matter, and methodical study of the very striking visual phenomena occurring in some cases of migraine along with other sensory symptoms of that disease. It would, however, be difficult to add to what Latham and Liveing have already done as to migraine. Excepting these physicians, little attention has been paid in this country to abnormal developments of visual sensations in their relation to developments of other sensations. But abnormal developments of sensations are as worthy of study as are developments of movements.

I now come to speak of the value of the *ophthalmoscope*. In cases of amaurosis, either with or without brain disease, there is nearly always, but not always, something abnormal to be seen in the fundus oculi. Moreover, it is an exceedingly common thing in physicians' practice for a patient, the subject of fatal brain disease, to have extremely abnormal ophthalmoscopical changes and yet see very well. I have been urging this for fourteen years, in season and also out of season, and have long since pointed out that the statement does not rest solely on the authority of physicians. It is still received in some quarters with great incredulity; but it is true, nevertheless, and therefore the ophthalmoscope should be used by routine in cases of intracranial disease.

I would mention one fault of inexperienced ophthalmoscopists. It is that they mistake physiological peculiarities in the fundus oculi for pathological changes. On the danger of this Liebreich has earnestly insisted; and it gives me great pleasure to acknowledge the debt I owe him for pointing out the significance of numerous slight peculiarities in the fundus oculi. I may here remark, too, that, so far as I can learn, no one has done so much for ophthalmoscopy as this distinguished ophthalmic surgeon.

I pass by the most important ophthalmoscopical appearances, those of optic neuritis, as I have very many times urged their diagnostic value. I can only mention that there is a simple atrophy of the optic discs which, in some difficult cases, is a great help towards the diagnosis of incipient locomotor ataxy. I can only mention Westphall's and Clifford Allbutt's researches on the condition of the discs in general paralysis of the insane. I must also pass by the researches of Mackenzie, Wordsworth, and Hutchinson into a form of amaurosis which they believe to be owing to tobacco. All these ophthalmoscopical conditions are of vital interest to physicians.

There is a very important pathological process which we can watch by aid of the ophthalmoscope: the process of embolism. Virchow predicted that the effects of embolism would be seen in the eye, that is, ophthalmoscopically, four years before Graefe, in 1858, did see them. Brudenell Carter showed before the Medical Society, some years ago, a marked case; the effects of the embolic process could be seen. This case, like others, showed that blocking of arteries can lead to increased quantity of blood beyond the plug, and even to extravasation. Now, the use of the ophthalmoscope in such a case as this is of vast interest as revealing the cause of the patient's blindness; but it is scientifically of extreme value as a contribution to the study of the process of embolism. The cases of blocking of a branch of the arteria centralis are most interesting. The whole process of embolism is within the eye, and may be looked at and its stages traced. Ophthalmic surgeons have done their work in these cases with their usual precision. The first case of partial retinal embolism was recorded by Samisch, the second by Hirschmann, and a third by Knapp. Knapp's case is of very great interest; numerous hæmorrhages were to be seen in the retinal segment supplied by the blocked arterial branch. Now, as Knapp says, this may be called a case of hæmorrhagic infarction of the retina. The interest of such a case is that it helps to complete our knowledge of the effects of embolism in general. It certainly is not widely known that the effects of plugging of arteries is commonly, not anæmia, as one might at first glance suppose, but hyperæmia and extravasation. The case might be called red softening of the retina; the process is just the same in cerebral red softening; there is arterial plugging leading to extravasation of blood. That blocking of arteries can lead to local hyperæmia, to increase of nutrient fluid, is, I think, worth some consideration in regard to the pathology of those diseases, such as epilepsy and chorea, in which the increased expenditure of energy implies of necessity increased nutrition by some process. In passing, I would express my wonder that the opponents of the embolic hypothesis of chorea do not advert to the absence of retinal embolism in this disease. There is only one case, by Swanzy.

Late in cases of embolism of the arteria centralis the blood is absorbed and the disc atrophies. A similar change,

making allowance for difference in the organs affected, follows in red softening of the brain; there is yellow softening; red splenic and renal blocks becoming washleather-like. Sometimes there is hemiplegia from embolism, and at the same time amaurosis from plugging of the arteria centralis retinæ. I saw a case of this kind in Sir William Jenner's practice with Dr. Gowers. In this case Sir William's diagnosis was confirmed at the autopsy, and a valuable account of it has been published by Dr. Gowers. I have seen several cases of hemiplegia in patients who had atrophy of one optic disc from retinal embolism of old date. It is very important to note exactly the condition of the disc and its arteries in uniocular atrophy, or we might be misled into the opinion that the atrophy was a consequence of the cerebral disease which caused the hemiplegia. This would be a very serious error; for, so far as I know, no kind of cerebral disease produces atrophy of but one optic nerve except by the process of neuritis, and that is, in physicians' practice, a thing of extreme rarity. As mentioned, Charcot believes that disease of a certain part of one cerebral hemisphere causes blindness of the opposite eye, but he says there are no ophthalmoscopical appearances.

The ophthalmoscope is valuable as revealing to us tissue-changes which are parts of, or local development of, general morbid states. We may see tubercle in the choroid during acute tuberculosis. The first case of this kind recorded in this country was by Soelberg Wells. Such a discovery may be of great help towards the very difficult diagnosis of tubercular meningitis as it occurs in the adult.

In some cases we may, so to speak, see syphilis ophthalmoscopically. Obviously this is a most important matter for physicians. I will mention especially that Mr. Hutchinson has of late years described a very chronic form of choroido-retinitis occurring in the subjects of inherited syphilis, and closely simulating retinitis pigmentosa. It begins insidiously and progresses slowly. It is distinguished from retinitis pigmentosa by its rarely being quite symmetrical, and by the fact that the choroid as well as the retina is disorganised.

The ophthalmoscope shows how misleading certain superficial inferences are in cases of syphilitic disease of the brain. The inference seems warrantable, at first glance, that if a patient who has paralytic symptoms from intracranial syphilis be amaurotic, his blindness will be due to a syphilitic change in the retina or choroid; yet it is nearly always owing to optic neuritis. A syphilitic tumour in the brain produces just the same kind of neuritis as does glioma, so far as I can tell.

Most valuable ophthalmoscopic signs of tissue-change in constitutional disease are those occasionally occurring with Bright's disease. These need not be described; they are stated in every text-book.

It may be asserted that we have no need to diagnose Bright's disease by the ophthalmoscope. That is, perhaps, quite true. It is done, however, sometimes. It is not a very uncommon thing for an ophthalmic surgeon to be the first to detect the existence of renal disease, and that, too, in patients who have been previously under medical care. In most cases there is no dropsy; the changes are generally found in cases of the small kidney; occasionally they are seen in cases of large white kidney with dropsy. Besides, too, it is surely important, in so grave a constitutional affection as chronic Bright's disease, to see all that is to be seen. It is important to note that not only the so-called characteristic changes, but considerable hæmorrhages, may exist, when sight remains good; for it leads us to infer that small cerebral hæmorrhages may not reveal themselves by any obvious symptoms. The discovery of these changes leads one to take a very grave view of the patient's case. However, it is to be mentioned, that all changes will sometimes disappear. I have known a patient who had the appearances of chronic Bright's disease in an extreme degree, who had convulsions and coma, get well—that is, into the state of health he was before the comatose illness, the fundus becoming practically normal. I have known the abnormal appearances in Bright's disease to disappear many times.

These appearances are not absolutely characteristic of Bright's disease. In some cases of cerebral tumour, we find appearances somewhat like them, and occasionally quite like them; and, in some cases of renal disease, the discs stimulate the common optic neuritis from intracranial tumour.

I would draw the attention both of ophthalmic surgeons and physicians to some minute ophthalmoscopic observations by Dr. Gowers in certain cases of Bright's disease. Dr. Gowers is so good an ophthalmoscopist, and, above all, knows so thoroughly well the varied healthy appearances of the normal fundus oculi, that I should accept these minute observations of his as being as exact as it is possible for such difficult observations to be.

Dr. Gowers finds that in a large number of cases of Bright's disease in which there exists increased arterial tension, the retinal arteries may be seen to be distinctly smaller than natural. The diminution in size can sometimes be noticed as an absolute reduction; sometimes it can be best estimated by comparison with the veins—the size of which, on account of their darker colour, can be more easily estimated. In one instance recorded, a reduction in size of the arteries was observed to coincide with an increase in arterial tension. Small vessels may be sometimes noticed in conjunction with hypertrophy of the heart without albuminuria, and probably coincide with a prealbuminuric stage of Bright's disease. When albuminuric retinitis has set in, the contraction of the vessels is often not to be observed, perhaps on account of the disturbing influence of the local condition. It is, however, to be mentioned that in some cases of Bright's disease without retinal changes, and with high arterial tension, there is no reduction in size of the visible retinal arteries. This would seem to show, Dr. Gowers thinks, that arteriole contraction is not the invariable, and therefore not the only, cause of increased tension.

Dr. Gowers lately showed at the Pathological Society a drawing of a fundus in which periarterial fibrosis was evident (it was extreme, around some of the arteries), and in which some small aneurisms could be seen on some of the vessels. This observation is of interest in relation to cerebral hæmorrhage. I would add that Liouville has found miliary aneurisms in the retina post mortem, like those found by Charcot, Bouchard, and Charlton Bastian in the brain. I conclude with mention of research by another physician whose ophthalmological observations are thoroughly trustworthy. Dr. Stephen Mackenzie[3] has drawn attention to spontaneous visible pulsation of the retinal vessels in connexion with aortic regurgitation. This, though described with much completeness by Dr. Otto Becker,[4] and referred to by some ophthalmic writers, does not appear to have met with general attention at the hands of physicians. He has related eight cases, with detailed observations as to the condition of the heart and vascular system; in all there was pulsation in the retinal arteries, or in both the arteries and veins. He pointed out that the phenomenon was generally most marked where the radial pulse was most typical of aortic regurgitation, and where the left ventricle was markedly hypertrophied. Secondary dilatation of the mitral orifice did not necessarily preclude it.

Dr. Stephen Mackenzie has also[5] described retinal hæmorrhages in connexion with purpura. Rue[6] has previously described hæmorrhagic retinitis in connexion with purpura. Dr. Wickham Legg[7] has recorded a case of retinal hæmorrhage observed by Mr. Vernon in a case of purpura.

HEMIANÆSTHESIA IN THE CLINIQUE OF PROFESSOR CHARCOT.

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THROUGH the great courtesy and kindness of Professor Charcot, I have recently seen with him many of the most interesting cases now under his charge in La Salpétrière, and am convinced that some account of these will prove of much interest to all who are engaged in the study of nervous diseases.

There were three examples of well-developed hemi-

[3] Med. Times and Gaz., May 1st, 1875.
[4] Graefe's Archiv, 18 Band, Abth. i. p. 206. Dr. Becker alludes to the previous description of Quincke (Berl. Klin. Wochenschr., 1868, No. 34, and 1870, No. 21). Dr. Fitzgerald (Brit. Med. Jour., Dec. 23rd, 1871) described one case where pulsation was visible in the arteria centralis retinæ.
[5] Med. Times and Gaz., March 3rd and 10th.
[6] Union Méd., 1870, No. 48.
[7] St. Bartholomew's Hospital Reports, 1875, p. 64.

anæsthesia; one of convalescence; and one of almost completed cure. The three cases first mentioned presented symptoms almost identical, and to these I will first direct attention, describing that which I saw and heard in the following order:—

1st. *Anæsthesia.* The skin, from the top of the head to the sole of the foot, on one side, was deprived of all sensibility. It might be pinched, pricked, burnt, or faradised, without eliciting from the patients the slightest indication of uneasiness by either word, look, or gesture. The line of insensibility corresponded closely, but not absolutely, with the median line on the forehead, nose, upper and lower lips, chin, throat, thorax, and abdomen. The upper and lower limbs were absolutely anæsthetic. A blunt pin thrust through the skin and brought out again at another point, either behind the ear, in the throat, in the arm, forearm, hand, or between the fingers, was regarded by the patients with a look of amusement, and was stated by them to be unfelt. The mucous membrane of the lip and of the side of the tongue was also insensible. Taste, smell, sight, and hearing were defective on the same side, but in varying degrees. There was analgesia as well as anæsthesia.

2nd. *Temperature, colour, and nutrition.* There was no difference that I could observe, in either one of these conditions, between the healthy and the anæsthetic side. M. Charcot has observed, however, as others have done, diminished temperature, and distinct pallor on the surface of the affected parts.

3rd. *Circulation.* There was no difference to be detected between the pulses on either side; but, with one exception only, the punctures that were made were absolutely bloodless; and yet no one of the patients was obviously anæmic. By "one exception" I mean a single exception in one case—viz., a puncture just above the wrist, from which a few drops of blood exuded.

4th. *Motion.* The muscular power was not defective in the anæsthetic limbs; but, on the contrary, as tested by the grasping of my hand, and by the dynamometer, was slightly in excess on the right (the anæsthetic) side. There was no want of co-ordination of movement; the patients could work with the needle or the crochet quite perfectly, and could execute any coarser combinations that were required. There was no deficiency of knowledge as to the position of the limbs; but M. Charcot informed me that he had met with this deficiency in other cases. With the exception of the periods of attack, I could observe no clonic or tonic spasm, nor any undue flaccidity.

5th. *Ovarian region.* In each of the three cases that I saw the patients complained of spontaneous pain, and also of tenderness in this locality; but, judging from the aspect, tones, and gestures of the patients, the pain did not appear to me to be severe, nor the tenderness extreme. The pain and tenderness were on the same side as the anæsthesia of skin. The position of pain and tenderness was somewhat higher than that which is generally regarded as due to change in the condition of the ovary. It was as high as the horizontal level of a line drawn between the upper projecting processes of the iliac bone, and corresponded, very nearly, with a vertical line cutting this from the mammilla.

6th. *Attacks of "hystero-epilepsy"* (Charcot). I had the opportunity of observing a great number of these seizures in one patient, a girl aged eighteen, who had suffered from them from the age of thirteen, one year before the commencement of menstruation. The attacks usually occurred at or about the time of the catamenia, but were not confined to that period. They occurred sometimes one or two hundred times in the day. It will be convenient to describe, separately, the aura, the attack, and the effects of compression of the ovarian region.

(*A*) *The aura.* Three patients described to me, in almost identical terms, the sensations that preceded the attacks. They were spontaneous, or might be induced by pressure. First, pain in the region of the ovary; next, its ascent to the epigastric region, sometimes with, sometimes without palpitation of the heart; then, a choking feeling in the throat, "globus hystericus"; this followed by a noise in the ear, whistling or hissing in character; after it, a beating in the temporal region; and then, loss of consciousness, followed by the convulsions which I witnessed.

There was something in the close resemblance of the descriptions given by these three patients, and in the extreme rapidity with which they were uttered, that made me think that they must have been frequently repeated beforehand; but now I will confine myself to facts, reserving comments for a later portion of this paper.

(*B*) *The attack.* 1. The first objective fact was jerking movement of the lower abdominal region, with some irregularity of respiration; the movement was produced by the rectus abdominis and the diaphragm, together with the other muscles of the abdominal walls. During this period, which lasted from five to ten seconds, the patient was talking merrily, but sometimes pressed the right ovarian region with her hand, and exhibited an expression of pain.

2. The second phenomenon was, in many respects, similar to an epileptic seizure. The right hand was turned outwards and backwards, being extended forcibly, the fingers were separated from one another, and held in quivering tonic spasm. The forearm was semi-rotated, by similar spasm, outwards; the upper arm was slowly contorted and removed from the side of the body. There was distortion of the features, rotation of the head towards the left side, and a general quivering rigidity of the whole body, but it was more marked on the right—the anæsthetic—side. The neck was rigid and swollen; the respiration was stopped for a few seconds; the lips were closed; the chest-walls fixed, and the face became reddened, but not dusky in tint. The eyeballs converged slightly, the right being rather more inwards than the left. The pupils were rather smaller than in the intervals of attack.

3. The third stage was one of general clonic spasm, during which the face became more deeply reddened; the conjunctivæ injected; gurgling noises were produced in the throat; frothy saliva issued from the mouth, but it was never coloured, nor was the tongue ever bitten. The breathing was irregular and forced, and the limbs were thrown hither and thither in a disorderly manner, but not with the degree of force that is often observed in even moderate attacks of epilepsia gravior. This stage lasted from five to fifteen or twenty seconds, and then the patient gave a sigh, breathed deeply, and a fourth stage presented itself.

4. This fourth stage resembled the sleepy condition that follows the ordinary, but mild, epileptic seizure. The face was tranquil, the limbs relaxed, the skin moist, the respiration deep but regular, the eyelids closed, and there was no sign of consciousness. This stage lasted from twenty to thirty seconds, when another phase presented itself.

5. In this, which may be called a fifth period, the patient became delirious, talking, screaming, gesticulating, and throwing herself about on the bed, generally as if in great terror, but sometimes in a pleading and remonstrative tone, and once in a somewhat voluptuous attitude. This wild delirium lasted for a few seconds, and then a sixth stage was entered.

6. The final period was one of as violent hysterical convulsions as I have ever seen. There was not only vehement laughing and crying, but the most extravagant contortion of the head, neck, body, and limbs. The head was thrown backwards and forwards, with a force that seemed to threaten breaking of the neck. The body was jerked from off the bed; the patient sometimes was in a state of extreme opisthotonos, resting on the nates, and—so far was the head thrown backwards—on the frontal aspect of the vertex, the trunk being raised high enough in the air for one of the nurses to have crept underneath it. This convulsion was of variable duration, but, when not arrested by pressure, terminated in a sighing mode of breathing, with the aspect of great exhaustion, some perspiration, and general flaccidity of limbs. Then the mind was as perfectly quick in appreciation, and the power of expression was as good, as in the periods of entire freedom from attack. Indeed, contrasting the mental state of this patient on the day of her attacks and immediately after their recurrence, and in the intervals between them, with that which I observed on the preceding day, when she had been free from seizures, I should say that she was distinctly sharper in appreciation, and more ready in repartee. There was a peculiar brightness in manner and conversation which did not exist on the day of freedom from attack. There was no elevation of temperature.

(*C*) Pressure upon the ovarian region instantly and invariably arrested these attacks. The pressure was made with the hand, was forcible, was over the painful ovary,

and on the anæsthetic side. It did not seem to matter at what stage of the attack the pressure was exerted—the morbid phenomena were at once at an end. M. Charcot stopped them and I stopped them in the stage of aura, in the epileptoid condition, during the delirium, and in the condition of hysterical opisthotonos. The immediate effect was opening of the mouth and protrusion of the tongue, and in another second, or fraction of a second, cessation of all spasm and return to complete consciousness, with the somewhat sharpened quickness of perception and expression that I have already mentioned. The patient talked or chattered with doctor or attendants in a voluble style, and without the least apparent difficulty, distress, or pain.

7. *Contraction of muscles.* This tonic condition of rigidity of muscles exists often in the anæsthetic limb in cases of the kind that I have mentioned. It usually commences abruptly, and sometimes, even after long duration, disappears as suddenly. It resembles in its locality and preference for the flexor muscles the "late rigidity" of Dr. Todd, but it differs in the mode of its onset and in its clinical relationships. It is so familiar to all who have seen much of hysteria, and so often exists without hemianæsthesia, that I need not dwell upon it longer.

8. *Removal of hemianæsthesia by application of metallic bands to the head, trunk, and limbs.* Whatever may be the explanation of this process, there can be no doubt as to the fact. A chain of Napoleons in one case, a plate of gilded metal in another, a bracelet of copper in a third, applied to the arm, speedily removes the anæsthesia, which is transferred to the opposite side; but the continuous application of these metals succeeds ultimately in removing all the symptoms.

I saw one case in which such proceedings had been adopted, and in which the sensibility was almost normal; and I saw another, the celebrated case of Anuria, with hemianæsthesia, convulsions, and contractions (related in M. Charcot's lectures), but which was now quite cured.

The points upon which I wish to make some comments are the following:—

1. The relation of anæsthesia and analgesia to changes in temperature, colour, nutrition, and circulation.

2. The retention of muscular power, and the faculty for co-ordination of movement, when tactile sensibility was entirely removed.

3. The relation of the attacks to ovarian conditions, both as to their onset and to the effects of compression.

4. The attacks, their difference from true epilepsy, their peculiarities in respect of aura, of convulsive movements, of succeeding mental condition, and of temperature.

5. The contraction of muscles; "contracture."

6. The *modus operandi* of the cure; the application of metallic bands.

(To be concluded.)

LARGE MYXOMATOUS TUMOUR SUCCESSFULLY REMOVED FROM THE NECK OF AN INFANT.

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MAUDE H——, aged seven months, was admitted into the Manchester Royal Infirmary on Dec. 8th, 1876, with a large tumour beneath the chin, reaching vertically from the symphysis menti to the sternum, and laterally from one sterno-mastoid to the other. The appearance of the tumour is tolerably well shown in the woodcut, made from a photograph which was taken while the child was in the infirmary. The tumour was movable, lobulated, and elastic; it had been first observed when the child was two months old, and had steadily increased ever since. Prior to admission the little patient had been under the care of my colleague Dr. Hardie, who had had a somewhat similar case some years ago, and which he reported in THE LANCET of November 9th, 1872. Dr. Hardie's case was in some respects a more formidable one than mine. The infant was but five months old, and the tumour reached further round the neck. There was considerable hæmorrhage at the time of operation, and the child nearly died in consequence. It eventually rallied, however, and made a good recovery. The tumour weighed four and a half ounces, and proved to be a multilocular cyst, akin to the compound hydroceles met with in the neck, and consequently belonged to a class far more common than the growth in my case.

Encouraged by the success of Dr. Hardie, and receiving the sanction of my colleagues, I proceeded, on Dec. 10th, to remove the tumour, making first a vertical incision over its centre, and subsequently adding another incision at right angles to the first and towards the right side. The

growth was situated beneath the deep cervical fascia, and required careful dissection to avoid the veins in the neighbourhood. The enucleation was, however, effected with very little loss of blood, no vessels requiring either ligature or torsion. The edges of the wound were brought together with silver wire, and the wound dressed with carbolic acid and glycerine.

The after-treatment of the case needs no detailed description. The child, indeed, never seemed to suffer from the operation, and could not be said to be ill at any time, although nearly three weeks elapsed before the large wound firmly healed.

Description of the tumour.—The tumour, which weighed 7½ oz., was lobulated, and measured 4 in. by 3½ in.; and, as the woodcut shows, occupied the whole of the anterior region of the neck. It was perfectly encapsuled, the capsule being everywhere adherent to the surrounding cellular tissue. On section it was pearly white, of semi-fluctuating consistence, and everywhere traversed by glistening bands of fibrous tissue. Dr. Dreschfeld, who kindly examined the specimen, has furnished me with the following particulars of its intimate structure:—"On close examination, it was seen that the capsule had a distinct fibrous envelope, and from it proceeded a number of fine trabeculæ, dividing the whole mass into alveoli. Microscopically, these alveoli were seen to have a fibrous envelope of their own, and their contents consisted of a homogeneous mucoid matter, in which numerous cells were found, some like ordinary tissue corpuscles, others star-shaped with many long outrunners, and others oval with long tapering ends. In all these cells a distinct nucleus, and in some nucleoli, were distinctly visible on the application of reagents. The tumour was not very rich in bloodvessels, which were found traversing the tumour along with the trabeculæ of fibrous tissue." In a word, the tumour proved a typical example of a myxoma, or rather of a mucous sarcoma.

Such tumours, always rare, may be thought to be so especially in childhood, as, with the exception of the soft myxomata, not unfrequently met with in the umbilical cord, there are but few recorded cases of unquestionable myxomata at this period of life. In the fifth volume of the Pathological Transactions, W. Adams relates the history of a case of a fibro-cellular tumour removed from the arm of a child of four months by Dr. Lonsdale, which from the appended microscopical report may perhaps be regarded as an example of what we now term a myxoma; and in vol. ix. of the same Transactions, Mr. T. Holmes records a case of a congenital fibro-plastic tumour, which he removed by écraseur from the back of the neck of a young child,

which may be looked upon as a myxo-sarcoma. At the same time, it is noteworthy that Holmes does not mention myxomata amongst the tumours occurring in early life in his separate work upon the Surgical Diseases of Childhood. Leubuscher, however, gives the details of a case of a gelatinous myxoma situated in the brain of a child aged seven, and Schuh fully records another example of a soft myxoma met with in the neck of a child of five months old, the latter case in many respects most closely resembling the one I here place on record.[1]

These constitute all the recorded cases I have been able to find which are presumably of this nature. At the same time I must confess to a feeling of doubt whether these growths are really so rare as it would appear; for, being of so simple a texture—akin, indeed, to embryonic structure,—the inference is that we ought often to encounter such tumours in early childhood, and I cannot but incline to the belief that the apparent rarity is due to two causes—first, to their nature being overlooked, being mistaken for lipomata, or even fibromata; and second, to the fact that such tumours, if allowed to remain, may probably change their nature, undergoing a true evolution, with the growth of the child, whose tissues are changing more and more from their early or embryonic type, so that when they come to be examined at a later period, we have no longer a soft and viscid myxoma, but a tumour with quite different histological characters, and which would properly be classed among the sarcomata.

A few words as to treatment and prognosis, which I will take in the order named. The fact that tumours of connective-tissue origin often grow quickly renders their early removal advisable, and this general rule is the more imperative in childhood because here pressure frequently produces disastrous results, and, further, because the growth nearly always interferes, and that to a marked extent, with the nutrition of the child. Nor is the removal of these tumours surrounded with any serious difficulty in early childhood. They are nearly always completely encapsuled; the free use of the director or the finger removes the gravest objection to extirpation, that of hæmorrhage; whilst the absence of any nervous shock preceding the operation, and, as a rule, the inconsiderable nervous shock which follows, render recovery highly probable if the child survive the immediate effects of the operation. Indeed, we are probably justified in saying that no age is too early to remove such tumours, if they be evidently increasing in size. It is, however, wise to note this feature of increase very carefully, as certain growths, congenital hypertrophies of cellular tissue for the most part, after remaining stationary for some time, spontaneously disappear. If removal be determined on, doubtless the proper plan is to completely enucleate the tumour, capsule and all, and not, as Mr. T. Holmes advises,[2] to open the capsule and dissect away the tumour from within. Such a procedure would, in all likelihood, be followed by a recurrence of the growth, the capsule being left behind. Of course, much depends on the diagnosis being correct, and to ensure this it is a good plan to insert an exploring needle in these nuchal tumours, when, if the growth is cystic, setons may prove successful, provided that at the same time the solid portions be attacked by injections of iodine, but if the tumour is solid throughout, then excision should be recommended.

And now as to prognosis—that is to say, what is the probability of recurrence in myxomata in early childhood? There is no doubt that, as a class, myxomata are prone to return, although this tendency seems to be worn out after several removals; but I think in early childhood the tendency to recur is more governed by heredity than by the special histological characters of the growth itself. In the debate which took place at the Pathological Society on Cancer in 1874 this point was brought out with special clearness: for example, it was shown that if a parent died of carcinoma, and the child inherited a sarcoma, that this latter growth would possess many of the peculiarities of its predecessor, and that the proneness to recurrence was handed down from parent to offspring with greater regularity than any special anatomical character. Now, in the case related above, I was not able to trace any hereditary taint whatsoever, and, therefore, I am inclined to prognosticate that the first operation will be the last, partly on account of the absence of heredity, and partly because it was completely extirpated before the system had time to be impregnated to any noteworthy extent with growing germs.

Manchester.

[1] For the first case vide Virchow's Arch., vol. xiii., p. 194, and for the second, Die Krankhaften Geschwülste of Virch., p. 417. For both these references I am indebted to my friend Dr. Dreschfeld.

[2] Surgical Diseases of Children, p. 376, 1868.

RÖTHELN.

BY JULIUS POLLOCK, M.D., F.R.C.P.,
SENIOR PHYSICIAN TO CHARING-CROSS HOSPITAL.

THE disease known as "Rötheln," or German measles, is perhaps sufficiently rare to make a well-marked outbreak of some interest. It occurred in a family in the N.W. district of London, and nothing is known as to how the infection was originally introduced.

On the 7th of April, one of the boys, aged twelve, came out in a rash about 11 A.M., which had much increased by the evening. He had a warm bath, and was sent to bed. The next morning he was covered with a red papular rash looking very like measles; the head, face, and neck were a good deal swollen, and the glands in the neck enlarged. There were symptoms of coryza, the eyes were suffused, and the throat rather sore. The rash was nearly gone the next day, and he was soon well.

No other case occurred until the 22nd of April, when one of the girls, aged fifteen, was found to have a mottled-looking rash under the skin upon getting up in the morning. After she was sent to bed, the eruption appeared to come out in red blotches, and then gradually spread all over the body. There were just the same symptoms of coryza in this case; the throat was sore, the tonsils enlarged, and the head, face, neck, and cervical glands a good deal swollen. She had violent headache, and felt very ill for one day and night, after which the symptoms subsided, she gradually became better, and the rash faded away, but left a mottled appearance of the skin, which lasted for several days.

On the evening of the 22nd, another daughter, aged eleven, developed the same symptoms, but in a much milder form, and was well again in a day or two. In this case there was no mottling of the skin left.

On the 24th of April another of the girls, aged sixteen, began to show symptoms of the disorder, and passed through a very severe attack. She was not able to get up until the 29th, when she still felt very weak, and the face remained mottled for some time.

On the 25th another boy, aged nine, came out with the rash, and had a mild attack of the disease, which left no mottling.

On the 30th of April the eldest daughter, aged nineteen, who had been absent from the house for six days, came home with a raised mottled rash under the skin, and feeling very sick and ill. After getting warm in bed the rash came out very freely all over her; and the face was swollen, the eyes suffused, the glands in the neck enlarged, the pulse 100, and the temperature in the mouth 101·2°, at 5 P.M. The rash was papular and mottled, not crescentic in arrangement, and looked in places much under the skin, in other parts standing out boldly as red spots. The tonsils were red and swollen; the tongue slightly coated with a brown fur, its papillæ being enlarged and red as in scarlet fever. At the end of a few days she was a good deal better, and was allowed to get up on the 3rd May and lie on the sofa; but the attack left her very weak, and the face was much mottled for some time.

In all the severe cases some amount of "peeling" took place about the lips and nose. The treatment employed was of the simplest kind: rest in bed, light diet, and some saline mixture every four hours.

Remarks.—In the more severe cases the symptoms and appearance of the disorder were well marked, and it was readily recognised as "German" measles. The period of incubation would seem sometimes to be very long, as the first case occurred on the 7th April, and the next not until the 22nd. It may be assumed that the cases which developed on the 22nd, 24th, and 25th, were the result of contagion taken from the first case; but the last, which began on

the 30th, was probably taken from one of the cases of the 22nd, as the patient left home on the 24th, and returned ill on the 30th. Thus the period of incubation varied from six or eight to fourteen or sixteen days. It may be noticed that the disease was more severe in the older, less severe in the younger, members of the family.

Harley-street.

CASE OF RENT ULCER.

BY CHARLES HIGGENS, F.R.C.S.E.,

OPHTHALMIC ASSISTANT-SURGEON TO GUY'S HOSPITAL; LECTURER ON OPHTHALMOLOGY TO GUY'S HOSPITAL MEDICAL SCHOOL.

Nov. 1st, 1875.—Mary H——, aged fifty-four, married, has had four children, three of whom are living and quite healthy, one died in early infancy from an unknown cause; has had one miscarriage; her general health has been excellent; no signs or history of syphilis; knows of no case of tumour or cancer amongst her relatives, but says her daughter has an obstinate ulcer on the face.[1] Thirteen years ago first noticed a pimple on the left side of her nose; five years later had a blow on her face, after which ulceration commenced at the site of the pimple, and gradually spread, involving the eyelids and cheek.

There is a large, deeply-excavated, ulcerated patch, involving the left side of the nose, upper part of left cheek, and inner two-thirds of left eyelids, the whole thickness of which is destroyed for a considerable extent. There is some thickening of the tissues at the margin of the ulcer, but no definite growth. The left eyeball is exposed, but is quite healthy, and vision is perfect. The eyeball was excised, and the ulcerated surface covered with a paste of chloride of zinc and starch spread upon strips of lint. After the separation of the sloughs the ulcer cicatrised to some extent.

May 29th, 1876.—The ulceration has again spread to about the same extent as at the time of application of the chloride of zinc six months ago, but has extended more deeply, opening the left cavities of the nose. Whole ulcerated surface destroyed with galvanic cautery.

Sept. 28th.—Wound cicatrised after separation of sloughs made by cautery; remained healed till quite recently. During the last three weeks ulceration has commenced afresh, and spread rapidly in all directions. She complains of great pain, and is unable to sleep at night. For the first time during the whole course of the disease her general health has begun to suffer; she has lost a stone in weight during the last three weeks.

An anæsthetic having been administered, a good-sized sponge attached to a strong piece of silk was pushed through the cavity into the back of the nasal fossæ, so as to prevent the blood from running back into the pharynx; then with a scalpel the whole of the diseased tissues with a good margin of the adjoining healthy structures, including the skin of the cheek, the remains of the eyelids, the mucous membrane, portions of the turbinated bones, and septum of the nose, were removed. The bleeding, which was very free, having been stopped by the cautery, the walls of the large cavity left were covered with a paste of chloride of zinc and starch in equal parts spread on lint. The patient was put to bed, and a hypodermic injection of morphia given. Ordered to take as much beef-tea and milk as she can swallow.

Oct. 18th.—During the week immediately succeeding the operation there was obstinate vomiting, much constitutional disturbance, and great prostration. The greater part of the slough has now separated; portions of the frontal and superior maxillary bones are exposed and dead; the wound is granulating healthily. There is some infiltration of the skin at the lower part.

Nov. 13th.—Two pieces of dead bone removed; all the surface has cicatrised except at the site of the removed portions of bone.

20th.—Another small portion of bone removed.

Dec. 18th.—There appears to be a small patch of ulceration at the outer side of the left nasal cavity. Chloride of zinc paste applied.

[1] I have been unable to see the daughter.

Jan. 1st, 1877.—Small slough has separated. Wound granulating.

Feb. 12th.—There is no sign of ulceration; her general health is excellent; has entirely lost sensation in the forehead and upper lip and other parts supplied by the supra- and infra-orbital nerves.

Brook-street, Grosvenor-square.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

INJURY TO PELVIS, WITH RUPTURE OF BLADDER AND ABDOMINAL AORTA; DEATH; REMARKS.

(Under the care of Mr. CHRISTOPHER HEATH.)

FOR the following notes we are indebted to Mr. Gould, surgical registrar.

C. C——, aged thirty, an iron dresser, was assisting to turn over an "engine bed" weighing about one ton, when it fell upon him striking the lower part of his abdomen. He lay some time under the iron before it could be lifted off. He was at once conveyed to the hospital.

On admission (6 P.M., Dec. 8th), he was suffering from severe shock; the face was blanched; he complained of pain over the pubes, and there was very marked tenderness in the left inguinal region; the scrotum was swollen. No fracture could be detected by the examination that was considered justifiable. There was repeated vomiting. A catheter was easily passed into his bladder, and about two teaspoonfuls of bloody fluid drawn off. The catheter was tied in, and a tube for drainage attached. Poultices were applied to the belly, and hot bottles to the feet. Ordered to suck ice.

During the night there was slight wandering delirium, and the man vomited several times, but no blood was seen. About half a pint of bloody urine passed through the catheter. At 11 A.M. the patient was quite conscious; extremely blanched; there was no pulse at the wrist, although the brachial pulse could be felt, 150. The belly was not distended, but there was slight general tenderness, most marked at the left groin. The patient gradually sank, and died at 7 P.M. on Dec. 9th, exactly twenty-six hours after the accident.

Autopsy.—The peritoneal cavity contained several ounces of blood mixed with a small quantity of serous fluid. Blood was effused under the peritoneum in both lumbar and iliac regions, extending down into the pelvis. The intestines and omentum were glued together with soft recent lymph. The pleura was separated from its mesentery in three places for a distance of one to three inches, and the mesentery was torn, but there was no rupture of intestines. The bladder was quite detached from pubes; the peritoneum over the apex was torn through, and there was a longitudinal rent in the anterior wall of the bladder, just behind the upper part of symphysis pubis, large enough to admit the little finger. The bladder was quite empty. At the bifurcation of the aorta, rather on the front of the artery between the common iliac vessels, was a hole through all the coats the size of a split pea, plugged by a soft adherent coagulum. The peritoneum over this was not wounded. The other vessels and all the other viscera were uninjured. The symphysis pubis was separated, the cartilage being adherent to the right os innominatum; there was also separation of left sacro-iliac synchondrosis.

In commenting upon this case Mr. Heath drew attention to the exsanguine condition of the patient as showing that some serious lesion had occurred, which proved to be nothing less than a rupture of the aorta, notwithstanding which the patient survived twenty-six hours owing to the fortuitous plugging of the aperture. On the patient's first admission

the house-surgeon had very properly introduced a catheter, with slight result; and as, from the nature of the accident, it was probable that the urethra was ruptured, and that the bladder might not have been reached, Mr. Heath thought it right when summoned to the case to inject some warm water, which passed easily but did not return, thus showing that it entered but escaped from the bladder. In the exhausted condition of the patient no operative interference could be ventured upon, but the attention of the students was called to the proposal by Mr. Holmes to open the abdomen and stitch up the bladder, after washing out the peritoneal cavity. The post-mortem examination showed commencing peritonitis, due apparently to the presence of the urine, which, in this case, was not so innocuous as is believed to be the case by Mr. Holmes.

LONDON HOSPITAL.

CHRONIC INTRACTABLE ULCERATION OF THE LEG; ERYSIPELAS; AMPUTATION ON THE ANTISEPTIC PLAN; RECOVERY.

(Under the care of Mr. RIVINGTON.)

THE subjoined report has been compiled from the notes taken by Mr. Davis and Mr. Fenwick, the dressers.

Elizabeth D——, aged forty-three, was admitted on July 27th, 1875. Five years previously the right leg was the seat of an ulcer, which commenced as a scratch from a toe-nail. She was then in the hospital for seven months, and was discharged cured. About July, 1874, it broke out again, and continued to increase in size up to the time of her admission. The patient had been a widow for ten years; she had never had any children. There was no overt evidence of syphilis, but there were opacities on the cornea of both eyes. There were two indolent ulcers, separated by a bridge of skin, occupying the front and lateral aspects of the lower third of the right leg. Grafting was tried on August 1st, and partially succeeded, but the ulcers could not be induced to heal. Various applications were used, and iodide of potassium was administered without permanent effect. The leg had evidently been the seat of more extensive ulceration at a former time, as the skin above the ulcers was tightly bound down to the tibia, and presented a cicatricial aspect. In December the limb continued useless and a source of constant discomfort, and when all ordinary means of cure seemed exhausted, the question of amputation was mooted. Before resorting to amputation, however, it was thought expedient to try the effect of incisions through the skin near the ulcers. This measure might have been beneficial, but a few days afterwards erysipelas, which had been prevalent in some of the other wards, set in, the leg and foot both became swollen, and the ulcers began to spread. The patient had several attacks of shivering; the temperature rose to 105°, and continued high up to the time of the amputation. Suppuration along the sheath of the tibialis posticus occurred, and a small portion of the tibia near it, comprising the groove for the tendon, became necrosed and loosened, and was removed. After the subsidence of the erysipelas, the foot continued swollen, and one or two abscesses formed on the dorsum. A portion of the tendon sloughed, and was taken away. The ulcers assumed a sloughy appearance, and a charcoal poultice was applied. Healing action now began to take place rapidly, and the patient improved in general appearance and condition. Early in February she again fell off, and then again improved. Iodide of potassium, which had been discontinued in favour of quinine and iron, was prescribed again in March with some benefit, and on the addition of perchloride of mercury the improvement became so marked that it was thought possible that the ulcers would entirely heal. The foot, however, became the seat of fresh suppuration, and one or two of the joints of the toes became disorganised. The patient's appetite again began to fail, and the pain at night returned.

Amputation, to which the patient had consented some time previously, was therefore resolved on. The operation was performed under ether on April 3rd. Lateral flaps were made of skin and fascia in the middle third of the leg. Two spray producers were employed, and the arteries were tied with carbolised catgut. Drainage-tubes were inserted, and the stump was dressed with protective gauze and lac plaster in due antiseptic form. The patient recovered well from the ether, and passed a good night without pain. Temperature 98·4°; pulse weak, but regular.

The stump was redressed by Mr. Rivington on the 4th about 11 o'clock A.M., and looked well. It was dressed by Mr. Rivington on the 6th, 8th, and 10th, when there was very little discharge, and again on the 13th, 17th, 22nd, and 28th, a gradually increasing interval being allowed to elapse between the dressings: first two days, then three, four, five, and seven. On May 1st the dressings were changed because the patient complained of pain. It was found that there was a small collection of pus in the outer flap. This was evacuated, and a drainage-tube inserted. Some stitches were also removed. After this the dressings remained on a fortnight at a time, and were finally abandoned on June 2nd. The stump had virtually been healed for some weeks.

The highest temperature attained after the amputation was 99·8° F. on the second day, and only on two or three occasions was it above 99°. Its general range was from 98° to 98·4°; occasionally it stood at 97·4°. The improvement in the patient's condition after the amputation was very noteworthy. Throughout the period of the after-treatment she took her food well, and slept well, and had comparatively little pain. Altogether the case was one which seemed strongly to testify to the value of the antiseptic treatment.

QUEEN'S HOSPITAL, BIRMINGHAM.

CASES OF ACUTE RHEUMATISM TREATED BY SALICYLATE OF SODA; REMARKS.

(Under the care of Dr. SAWYER.)

THE following notes were taken by Mr. H. W. Thomas, house-physician.

CASE 1. — Sarah B——, aged eighteen, general servant, admitted Jan. 10th, 1877. The patient has always been delicate. She had an attack of acute rheumatism when a child. Did not commence to menstruate till the age of eighteen. Three days before admission she took cold through getting wet and remaining in her wet clothes. This was soon followed by rigors, pains in the knees, feet, and shoulders; the skin was hot, and she complained of thirst and restlessness. Within twenty-four hours the joints began to swell and redden, causing her great pain on movement, and compelling her to keep in bed.

On admission the patient could not move her limbs without great pain. She complained of pains in both the upper and lower extremities; the joints were swollen, red, and tender; skin dry; tongue furred. There was intense thirst. Chest resonant; sibilant râles universal; cardiac apex beat normal; a bæmic bruit heard at base; no pericardial friction sounds. Temperature 103°; pulse 112; respiration 28. Urine high-coloured, acid, sp. gr. 1029, no albumen; copious deposit of urates. Ordered fifteen grains of salicylate of soda, in water, every four hours; milk diet; cotton-wool to joints.

Jan. 11th. — Passed a restless night. Temperature 101. Perspired freely. Evening temperature 102·6°.

12th.—Had a good night. All pains had ceased. Tongue moist. Temperature: morning, 100·4°; evening, 100·8°.

13th.—Slept well. No return of pains. No cardiac complications. Temperature: morning, 100°; evening, 100·2°. Pulse 80; respiration 22.

14th.—Patient comfortable, and able to move the limbs with ease. Temperature 101°.

15th.—Temperature: morning, 99·6°; evening, 99·7°.

16th. — Much stronger. Temperature: morning, 99°; evening, 98·6°.

From this time the patient was entirely free from pain, the temperature ranging between 98° and 99 each day.

22nd. — Temperature 98·5°; tongue clean. Ordered one ounce of a mixture of the iodide of iron three times a day, and meat diet.

24th.—Patient got up.

26th.—The bæmic bruit still audible. Temperature 98·6°. Ordered two teaspoonfuls of cod-liver oil twice a day.

29th.—Discharged, well.

CASE 2.—Gertrude E——, aged seventeen, press-worker, admitted June 10th, 1877. Had always been weakly, and subject to sore-throat; often exposed to wet, and readily

took cold; had never worn flannels. She stated that a week before admission she took cold from going out of a warm room into the cold atmosphere. She soon experienced pains in the joints, and severe headache; the former increased rapidly, thus compelling her to keep in bed.

On admission the patient was quite helpless, and complained of aching pains in all her joints, which were red, swollen, and tender. The skin was hot and dry, the tongue thickly furred; there were anorexia and thirst. Chest clear; no abnormal sounds could be detected over the lungs. Heart-sounds weak, but there was no bruit. The bowels were confined. Urine acid, sp. gr. 1027; no albumen; deposits urates. Temperature 102°; respiration 28; pulse 96. Ordered fifteen grains of salicylate of soda in water every four hours. Cotton-wool to joints. Diet: Milk and beef-tea.

11th.—Complains of pain in the præcordial region and between the shoulders; slight friction sounds are heard at base of heart. Skin perspiring. Temperature 101·2°; pulse 90; respiration 27. Ordered a cantharides plaster 2 in. by 3 in. over cardiac base. To have twenty grains of compound jalap powder at once.—7·30 P.M.: Patient much relieved; the friction sounds are still audible. Temperature 101·8°.

12th.—Passed a good night. All pains ceased. Temperature: morning, 100·6°; evening, 101°.

13th.—No abnormal sounds can be detected over heart. Slept well last night. Temperature 100·5°.

14th.—Patient is much better. No pains. Temperature: morning, 99·2°; evening, 101°.

15th.—Sleeps well. Temperature: morning, 99°; evening, 99·5°.

16th.—Temperature: morning, 98·6°; evening, 98·4°. Tongue clean; no thirst; appetite returning.

20th.—Improving daily. Temperature 98·5° since last report.

22nd.—Temperature keeps normal. Patient to get up. Ordered meat diet. To have one ounce of iodide of iron mixture three times a day.

28th.—Discharged, well.

CASE 3.—Wm. J——, aged nineteen, porter, admitted Jan. 10th, 1877. Patient had never been strong. When sixteen years old he had an attack of acute rheumatism, and was laid up for two months. Fifteen months afterwards he had typhoid fever. He had been much exposed to the inclemency of the weather, but had been in the habit of wearing warm clothing and living well. Four days before admission patient got wet to the skin, and on the next day experienced pains in the joints, accompanied with rigors, hot skin, and intense thirst; the affected joints soon became swollen and tender.

On admission, he had an anxious face; he could not walk; he complained of gnawing pains in the ankles, knees, and arms, headache and thirst; skin hot and dry; the ankles and knee-joints were swollen, blushed, and tender; tongue thickly furred; bowels confined; no pulmonary nor cardiac complications could be detected. Temperature 102°; pulse 104; respiration 28; urine acid, sp. gr. 1029, no albumen, deposits urates. Ordered fifteen grains of salicylate of soda every four hours. Cotton-wool to joints. Milk diet.

Jan. 11th.—Very restless through the night; had an attack of epistaxis; a reduplication of first sound is heard over the base of the heart. Temperature 100·8°. To have twenty grains of compound jalap powder at once. Evening temperature 102°.

12th.—Slept better; the bowels have acted well; perspires freely. Temperature: morning, 100·8°; evening, 101·3°.

13th.—Passed a restless night; complains of pain in the præcordia; a rough friction-sound is heard over the base of the heart. Temperature: morning, 99·8°; evening, 100·3°. To have a cantharides blister 3 in. by 3 in. over the heart.

14th.—All pains have ceased; slept well last night. Temperature: morning, 98·3°; pulse 72; respiration 24.

19th.—Patient improves daily; no return of pains; temperature keeps normal; tongue clean; appetite good. Ordered one ounce of perchloride of iron mixture three times a day. Meat diet.

22nd.—No abnormal cardiac sounds; temperature keeps normal; bowels confined. Ordered one ounce and a half of compound magnesia mixture at bedtime.

23rd.—Temperature 98°. Patient to get up.

26th.—Patient goes about the ward, and feels convalescent. Ordered two teaspoonfuls of cod-liver oil twice a day.

28th.—Discharged well.

Remarks by Dr. SAWYER.—Than acute rheumatism few diseases have been met by a greater diversity of remedies, and in none ought we to be more cautious in drawing therapeutic inferences. During the last nine or ten years, and until a few months ago, I have treated some hundreds of cases of acute rheumatism in the following manner:—The patient has been laid in bed, between blankets, the affected joints have been swathed in cotton wadding, and fifteen or twenty grains of bicarbonate of potash have been given every four or six hours. Inflammatory cardiac complications have determined the application of a fly blister, or a few leeches, over the heart; a dose of Dover's powder has been administered in the evening, when there has been sleeplessness. The three patients whose cases are here recorded as decided, but mild, examples of acute rheumatism, were admitted into the hospital upon the same day, and to each the salicylate of soda was regularly given. In the first case the temperature became normal upon the seventh day, the ninth day of the disease, and remained at a healthy range until the patient's discharge at the end of twenty days; in three days all pain ceased, and there was no return of it. In the second case the temperature fell to the range of health upon the seventh day, the ninth day of the malady, and remained normal for twelve days more, when the patient was discharged; on the third day all pains in the joints ceased, and they did not return. In the third case the temperature became natural upon the fifth day, the seventh day of the disease, and it did not subsequently leave the normal range; on the fifth day pain disappeared, and did not afterwards return. In two of the cases there was a limited and transient pericarditis. All the three cases coincided in their rapidly favourable course, and it is not improbable that the use of the salicylate of soda was one of the causes of such satisfactory result. It is only when a very large number of cases shall have been observed that we can reasonably conclude whether the salicylates are or are not to be regarded as empirical remedies for acute rheumatism. My own limited employment of these drugs has given results which lead me to regard the salicylates as likely to attain a permanent place in the therapeutics of rheumatic affections.

Reviews and Notices of Books.

The Treatment of Spina Bifida by a New Method. By JAMES MORTON, M.D., Surgeon and Clinical Lecturer on Surgery in the Glasgow Royal Infirmary. Glasgow: Maclehose. 1877.

THE usual treatment of spina bifida by protection and pressure is so very unsatisfactory and so seldom successful, and the accidental or intentional escape of the cerebro-spinal fluid from the sac is so uniformly fatal, that any new method of dealing with this deformity which promises a good result is bound to commend itself to the attention of every surgeon, as these cases of deformity are so very common. The injection of a dilute solution of iodine has been used, more or less successfully, by Velpeau, Brainard, and others; but Dr. Morton has greatly improved on their plans of procedure by employing a fluid with less diffusibility. An iodo-glycerine solution, composed of ten grains of iodine and thirty grains of iodide of potassium, dissolved in an ounce of pure glycerine, is injected, in varying quantities according to the size of the tumour, generally about half a drachm being sufficient. The details of the fifteen cases narrated in this *brochure*, most of which have already appeared in the medical journals, are eminently satisfactory, and lead us to hope that we may be able in future to cope much more successfully with such cases. Two precautions seem absolutely necessary, and on them much of the value of the operation depends. A medium-sized trocar and cannula must be used, because the iodo-glycerine fluid will not pass

readily through a small cannula; and the puncture must be carefully sealed up after the operation by collodion or collodion flexile, lest the cerebro-spinal fluid should escape and so cause the death of the child. The puncture should be made slightly to one side of the middle line and as near the upper part of the tumour as possible. If necessary, the swelling may be reinjected after the lapse of two or three weeks. Dr. Morton began this plan of treatment in 1871; and in his earlier cases tentatively drew off the fluid contents once or twice before injecting the sac, but his later experience would show that this is unnecessary. If, apart from the spina bifida, the child is sound and thriving, and there is no paralysis of limbs or sphincters and no other important deformity, a permanent cure may be reasonably expected; but in cases complicated with hydrocephalus neither this nor any other treatment is of much avail. Dr. Morton deserves great credit for having apparently placed under safe and speedy treatment a class of cases which were formerly considered almost beyond hope of recovery.

Diagnose und Therapie der Krankheiten des Menschen (The Diagnosis and Treatment of Disease). Von Dr. BERNARD KRAUS. Wien: Moritz Perles. 1877.

THIS is a valuable work of reference for the practitioner, and embraces the whole range of medicine and surgery. Without in the least professing to be original, the author has undertaken the labour of compiling a summary of the causes and symptoms of disease and injury, and has appended to each description an outline of the treatment generally in vogue. As showing the wide range of subjects included, we may instance subjects which find but little place in most general treatises of medicine and surgery, as diseases of the skin, eye, and ear, and the diseases of women and children. Great care and pains have evidently been bestowed upon the compilation, and not the least useful portion of the work is the therapeutical, for appended to each of the sections on treatment is a list of prescriptions, many of which are culled from the writings of those who have devoted special attention to the subjects treated of. The prescriptions are drawn upon the metrical system, and the only fault there is in them—if fault it be—is their number and variety. In this respect the dermatological section carries off the palm; e.g., there are no fewer than ten formulæ given for psoriasis, many of which are simply modifications of the same combinations repeated with but slight difference. However, as many of these formulæ are introduced from English writers, we have no cause to complain; and the book as a whole is so complete in its range, and exact in its details, that it ought to be largely used.

The Microscopist: a Manual of Microscopy and Compendium of the Microscopic Sciences. By J. H. WYTHE, A.M., M.D. Third Edition. London: J. and A. Churchill. 1877.

THE rapid advance of microscopical studies within comparatively recent years renders the compilation of such a work as this no easy matter. For the author—who is professor of Microscopy and Biology in the Medical College of the Pacific at San Francisco—has endeavoured to embrace within his pages an account of the application of the microscope in mineralogy, chemistry, biology, histology, and pathology. Of necessity it must needs be that some of these subjects are treated with a brevity and a sketchiness by no means commensurate with their importance. Still there is much that is valuable in the book, and the general character given to it may prove an advantage, as encouraging and directing a medical student, for example, to spend some of his leisure hours in travelling beyond the confines of animal histology. The introductory chapter, upon the construction of the microscope, the apparatus, reagents, &c., necessary, and the methods of examination, is well done, and it appears to us that the sections on microscopical mineralogy and chemistry are better than those on biology, and these again superior to those devoted to animal and morbid histology. The latter is especially weak, and might well have been omitted. The book is profusely illustrated, and in every respect admirably got up. Travelling over much the same ground as Dr. Lionel Beale's work, it bears less the stamp of originality either in the text or engravings than that book; but it is, however, less lengthy, and on that account it may be more widely read. At the same time we cannot help expressing the opinion that the day is past when such works, which aim at covering the whole field of microscopical investigation, can be expected to have as much scientific value as treatises devoted only to single portions of the subject.

Tables of Materia Medica. A Companion to the Materia Medica Museum. By T. LAUDER BRUNTON, M.D., F.R.S., &c. London: Smith, Elder, and Co. 1877.

ANY aid to the student of materia medica is always welcome. The subject is one which, studied by itself, apart from the practical knowledge derived from pharmacy on the one hand, or therapeutics on the other, is, it must be confessed, very devoid of interest. The student is obliged, at an early part of his career, to fill his mind with a quantity of facts concerning drugs and their preparations, which want the vitalising interest involved in the application of these facts to practical medicine. Dr. Brunton has, then, performed good service in undertaking the laborious task of the present compilation. He has managed to draw up tables which contain in brief all the necessary facts concerning the substances used in medicine, their source, preparation, properties, reactions, impurities, tests, action, use and abuse; the organic materia medica being treated on essentially the same plan—only, instead of sources of impurity, he uses "substances resembling it (the drug) or adulterations." His plan has the merit of simplicity, and the even greater merit of a strictly scientific arrangement; and we can heartily recommend these tables for the purpose for which the author designs them—namely, to serve as "a companion to the materia medica museum."

THE UNARMED STRENGTH OF ENGLAND.

PLACED as England is, by the happy accident of her geographical position, beyond the necessity of compulsory enlistment, it has been too much the fashion of late to regard her as intrinsically unable to cope with the national armaments of the Continent. While admitting that nothing short of imperilled national existence would justify the exercise of conscription, yet it may be useful to inquire what response the country could give to this demand, and what are the comparative capabilities of England and some of the other European Powers in this respect.

The publication of the Statistical Year-book of Austria for 1871 affords an excellent basis upon which to institute the proposed comparison. Having determined upon the attainment of a war-effective field-force of 800,000 men in the decade from 1868 to 1878, Austria imposes on each citizen a liability to military service, and calculates that the annual requirement will be about 84,000 men, this number to be drawn by lot from the adult male population between the ages of twenty and twenty-two years inclusive, each recruit so drawn to serve ten years—three in the standing army, and seven in the reserve. The population of Austro-Hungary was, by the census of 1869, in round numbers, 36,000,000, of whom it has been estimated that the constant average of males annually attaining the age

of liability for military service is 334,000.[1] From the Statistical Year-book, 1st Part, it appears that while 506,707 adults between the ages of twenty and twenty-two years were medically examined for military service, only 155,122 (or 306 per 1000) were pronounced "fit"; 72,380 (or 143 per 1000) being rejected for deficient height and chest measurement, and 279,076 (or 551 per 1000) for bodily defects. Thus the proportion of "fit" to "unfit" becomes as nearly as possible as 3 to 7. It is evident, therefore, that of the 334,000 young men who become annually available, but three-tenths (or 100,200) will be found capable of bearing arms, and that, since 84,000 are required as the yearly complement for the ranks, only a surplus of 16,000 remains to meet other contingencies and to supplement the various legalised exemptions. By this man-tax, then, the physical capabilities of the population are drained to the very dregs, and whether military service will act as a wholesome gymnastic or as a deteriorating influence upon the prime of each generation remains for future experience to declare.

In the Army Medical Report of the British Army for 1872 it is stated that "the total number of recruits examined was 28,390, the total number rejected 8990," or nearly one-third, making the proportion of "fit" to "unfit" as 2 to 1. Now arise the questions whether the whole youth of a country between the ages of twenty and twenty-two years and the voluntary recruits from eighteen to twenty-eight years are legitimately comparable, and, if so, which ought to afford the larger number of rejections. Recognition of the causes which unfortunately are still the main reasons of the recruit seeking the English army as a refuge will indubitably point to universal conscription in early manhood as more likely to ensure the higher ratio of fitness. It is within the mark, then, to assume the British capability to bear arms at two-thirds of the youth between the ages of twenty and twenty-two years.

The population of England, according to the census of 1871, may be taken at 32,000,000; and if, out of the 36,000,000 of Austria, 334,000 males annually attained the age of twenty years, it may also be inferred that in England 296,000 would arrive at a like age in each year; but whereas in Austria only three-tenths are found fit for service, while in England two-thirds are accepted, it necessarily follows that England could annually enrol 197,333 men against the 100,200 whom Austria could produce. Seeing, then, that the former is almost twice as productive of able-bodied men as the latter, we must seek in the causes of rejections among the conscripts and in the reasons of subsequent mortality and invaliding of the mature soldiers for an explanation of the relative physical conditions of the two nations.

The same cause of primary unfitness heads the list in either country—viz., "muscular tenuity and debility," which, however, among the Austro-Hungarian conscripts prevails to the enormous extent of 281 per 1000, while of the English recruits only 56 per 1000 are incapacitated thereby, even when those of "impaired constitution" are taken in addition, thus showing a fivefold muscular superiority on the part of Great Britain. Next in order of Austrian disabilities come "diseases of joints," in the extraordinary proportion of 106 per 1000, testifying the probability of extensive scrofula, while for this cause not 10 per 1000 are refused in England; but the second place in the latter country is given to "diseases of eyes and eyelids," to the amount of 41 per 1000, which among the Austrians only reaches 26 per 1000. In both countries the third cause of rejection is alike—viz., "diseases of the circulatory organs," being in Austria 79 per 1000, and in England 60, including varicocele.

If now the sources of inefficiency which give rise to final invaliding be examined, much may be gathered respecting the influences which operate in the respective localities. In Austria three groups of diseases embrace nearly nine-tenths of the invalids—viz., "diseases of digestive organs and the viscera connected therewith" 408 per 1000; intermittent fever, 285 per 1000; bronchial affections (exclusive of phthisis), 182 per 1000. Now of these the first section, including as it does affections of the liver and spleen, diarrhœa, and dysentery, is doubtless intimately dependent on the second, intermittent fever, and both are largely due to climatic causes, which by direct and indirect action go far to swell the number of primary rejections from general debility; and it is equally certain that to the absence of these deteriorating climatic influences is due the muscular superiority of England, since of the English loss by invaliding "general constitutional diseases" form the chief cause, diseases of the circulatory system the second, and those of the digestive tract the third.

As to the amount of service rendered to the State by the respective standing armies, the sick of the Austrian army in their native climate reached 1869 per 1000, so that nearly every man was twice in hospital during the year; whereas British soldiers, serving as they were in distant lands and under unnatural conditions, sought admission into hospital only at the rate of 1022 per 1000. Again, while the Austrians died at the rate of 16 per 1000 at home, the English, amid all the risks of foreign stations, showed a total mortality of but 12 per 1000.

It is evident, therefore, that the proposition with which we started—viz., that England, out of a given number of her youth, can muster nearly twice as many fit to carry arms as Austria can produce, is fully borne out by the numerous proofs of superior physical endurance which her soldiers offer, and that not only has she a far richer fund of unarmed strength, but that the rate at which that strength, if put in use, would become expended is far less rapid.

[1] The Armed Strength of Austria. By Captain Cooke, 22nd Regt.

UNIVERSITY OF LONDON: MEETING OF CONVOCATION.

THE ADMISSION OF WOMEN TO MEDICAL DEGREES.

THE attendance of medical graduates at the meeting of Convocation of the University of London, on the 8th inst., was very large. Dr. Storrar, the Chairman of Convocation, presided. After some preliminary business had been transacted, the House passed to the consideration of the chief business, which was to consider the proposal sent down from the Annual Committee, "That Convocation thanks the Senate for their resolution to admit women to degrees in medicine."

Mr. H. A. NESBITT, M.A., in moving this resolution, pointed out that on three several occasions a majority in Convocation had declared itself in favour of the admission of women to degrees; but this could not be carried into effect until a new charter had been obtained. Mr. Russell Gurney's Act, enabling the universities to confer degrees in medicine upon women was the outcome of the resolution passed by the General Medical Council in 1875; and on Feb. 28th of the present year the Senate of the University of London resolved, by a majority of 14 to 7, to take advantage of the facilities afforded by that Act. Since then a memorial, signed by 230 medical graduates, had been presented to the Senate, asking that body to rescind their resolution, and notice had been given of a motion to that intent. The speaker did not, however, think it likely that the Senate would retreat from its position. He criticised the arguments appended to the memorial as being intended to catch votes, and he did not believe that any difference in the regulations of the examinations between male and female candidates was contemplated. He then reviewed the difficulties women had had in order to obtain medical qualifications, difficulties in being placed on the Register, in having a proper school of medicine and hospital which could be recognised by examining bodies. At length all these difficulties had been surmounted, for only a few weeks ago the King and Queen's College of Physicians in Ireland had consented to admit women to their examinations. It was too late, then, to exclude women from the medical profession; and, in opposing their admission into the University, they would be practically limiting them to the lower ranks of the profession. He considered that Convocation would stultify itself if it refused to adopt this resolution, and the Senate would have good grounds for neglecting resolutions sent to it by the former body.

Mr. A. W. BENNETT, M.A., B.Sc., seconded the motion,

and pointed out that for the first time the Annual Committee, Convocation, and the Senate, were all of one mind. He was at a loss to understand the bitterness with which the question had been argued. He dwelt upon the fact that Convocation had three times voted in favour of admitting women to degrees. It had been said that if the resolution of the Senate were carried out its effect would be injurious to those who had already taken degrees, to the University, and to women themselves. The first objection could not be supported, it was most repugnant to English principles; as to the second, he could not see how the value of the degree would be lowered, for the stringency of its examinations would be as great then as now; lastly, although much medical and physiological authority was to be found in support of the last objection, there were others of equal eminence who did not consider that women were unfitted for the medical profession.

In reply to Dr. Savage, the Chairman said that he was not prepared to say that the Senate would disregard any resolutions proposed by Convocation.

Dr. SAVAGE therefore proposed an amendment to the effect that Convocation recommended the Senate to rescind their resolution of Feb. 28th, in view of the expression of opinion in the memorial signed by 230 medical graduates. He pointed out that the Senate had suspended its action until Convocation had declared itself; and he commented on the difficulties in the way of securing the attendance of medical graduates at Convocation. With regard to the question of conferring medical degrees upon women, he considered that, although fitted for nurses, apothecaries, &c., women were quite unfitted for the medical profession.

It was pointed out by Dr. Buchanan that the amendment proposed by Dr. Savage was not in order, since it raised the precise negative of the resolution proposed. Dr. Savage then withdrew his amendment, and Dr. Buchanan proposed another amendment—viz., to insert after the word Convocation the words "desiring that women should be admitted to degrees in all the faculties." This amendment being accepted by Messrs. Nesbitt and Bennett, the resolution as amended stood as follows:—"That Convocation, desiring that women should be admitted to the degrees in all the faculties, thanks the Senate for their resolution to admit women to degrees in medicine."

Mr. SAVORY said the time had passed for discussing the question of the admission of women into the medical profession upon its intrinsic merits; but as regarded the University he believed that at least three-fourths of the medical graduates were opposed to the granting of medical degrees to women, and was it right of the graduates of the other faculties to force this strange innovation upon them? The medical graduates were the best and most impartial judges of the question, and he repudiated the notion that they were moved by motives of jealousy to exclude women. For himself he declared that he would not and could not act as an examiner to women in subjects which, if set aside and ignored, would reduce the examinations to a mere farce. The question concerned almost wholly the medical graduates, and the members of the other faculties might at least credit them with purity of motive. Mr. Savory concluding by moving the following amendment:—"That this House is of opinion that it is undesirable for this University to admit women to degrees in medicine before it shall have considered the advisability of admitting women to degrees in all faculties."

Dr. BARNES seconded the amendment. He referred to the circular signed by Messrs. Osler, Hutton, and Finch, and would ask what these gentlemen knew about medicine; and he considered this to be purely a medical question. If the resolution was carried by the Senate, the character of the University would be degraded, for there were matters in which it was impossible for a medical man, with a proper sense of self-respect, to teach or to examine women. If women be admitted, the examinations would be maimed, and an imperfect degree granted. No arguments had been brought forward meeting this objection; the proposer of the original motion had contented himself with a sort of historical *résumé* of the question of medical women, and had informed them that the school of medicine for women at present established was a perfectly efficient institution.

Mr. T. SMITH OSLER said that it was almost impossible for this question to be argued in such an assembly, when both sides approached the question with so deep a sense of responsibility. He denied that the body of medical graduates was unanimous upon the question; there was a minority, including many distinguished men, who thought that women had a right to obtain medical degrees; and as many as from 40 to 50 medical graduates a few years ago signed a memorial, addressed to the representative of the University, begging him to use his influence to obtain a new charter for the purpose of admitting women to degrees. The late Dr. Anstie was well known to be an advocate of the medical education of women. But he would point out that this matter was not one concerning merely one faculty, but the whole University, and Convocation must act with the responsibility of the University, and not suffer the question to be a division between the faculties. The reason why the Senate had taken this step was because without a new charter it was illegal to confer any degrees upon women, except the medical; and Russell Gurney's Enabling Act showed that it was the distinct opinion of the Legislature that women should be admitted into the medical profession. By refusing the degrees of the University to women, they were excluded from obtaining the highest standard of medical education.

Dr. QUAIN said the question was not whether simply two or three women desired to become medical graduates, but it involved the whole subject of the future relations between men and women. If women were admitted to these degrees, there was no position in life from which they could be, with reason, excluded. They would have an equal right to practise in the law-courts, to enjoy political rights, &c., so that the ultimate question was, were women to be placed in all social and political matters upon an equality with men? Was the Senate to be thanked, after having on three or four occasions turned a deaf ear to Convocation's will that women should be admitted to all degrees—was it to be thanked now, when it had hastily passed a resolution to confer medical degrees upon women because a single woman had asked for it? Why did not Mr. Osler get the signature of a medical graduate to the circular he sent round if he considered the question was one to be dealt with by all the faculties. It was absurd to grant degrees to "nurses," and it had to be shown that there was really a desire in the country that women should be allowed to practise medicine. At the same time that it was proposed to give women degrees in medicine, it was said they were not to be allowed to sit in Convocation. He considered Mr. Savory's amendment was the most proper way to consider the question.

A MEDICAL GRADUATE, who said he was a provincial practitioner, objected to the measure being thrust upon the medical graduates by the other faculties.

Sir WILLIAM JENNER, who was received with great cheering, said that the medical graduates did not often come to Convocation because, as a rule, the speaking was entirely done by those whose profession it was to speak, and who so monopolised all debates, that he remembered a late distinguished graduate telling him that, when on the Annual Committee, it was difficult to get anything said by the medical members, because some of the other members could not snuff the candle without making a speech. Mr. Osler had said that Convocation represented the University, and not any single faculty; but by the very action he had taken he had disregarded the wishes and opinions of the medical faculty. If the Senate persisted in its action it would lower the status of its degrees, and much injury would be done to the present medical graduates, not in a pecuniary way, as a journal noted for its crotchets had recently hinted, but because the value of the London degree would be lowered in the eyes of the public. It was absurd to deny women a seat in Convocation and at the same time assert that they had sufficient ability to take degrees in the University and to practise medicine and surgery. He begged the graduates in arts and laws, in considering this question, to place themselves in the same position as the medical graduates had been placed.

Dr. WILKS said that he belonged to the small party who were in favour of the admission of women to degrees in general, but he was going to vote for the amendment. He denied that women were specially fitted for the practice of medicine, but, on the other hand, he could not refuse the other argument which asked that women at least should have the chance of entering the profession if they chose. Mr. Russell Gurney's Bill was passed on the former ground, which was quite fallacious.

Mr. STANSFELD, M.P., denied that the speakers in support of Mr. Gurney's Bill used arguments such as were attributed to them by Dr. Wilks. Parliament had taken action mainly upon the ground that there was a widespread desire among women to be attended by members of their own sex. The opinion of the medical graduates was that women were not fit to follow the medical profession; but that was merely an opinion, and, looking at other pursuits, it must be remembered that women followed mostly the same avocations as men, except where the law stepped in to forbid them. He thought that in many matters concerning childhood and girlhood the woman would have a far more delicate perception of the nature of affections than could possibly be obtained by a man. It was merely a question of right.

Dr. WILSON FOX said it was a fallacy that women desired to be attended by women; and, further, it was physically impossible for any woman to undertake the duties of a large general country practice. The only result would be to admit a few *dilettanti* practitioners into a few great towns. He would say nothing as to intellectual ability; but he maintained that the woman of civilisation and culture had not the physical health to practise in country districts, where it was often necessary to rise at night and ride for miles to attend on women in their time of greatest need. The effect of the admission of women to the medical degrees would be to deteriorate the profession and the University. It would stop the inflow of male candidates. He had himself been always proud to belong to the University of London; but were this step taken by the Senate he would have to seek elsewhere for a degree, for he could no longer belong to a University which submitted to such a degradation. So strongly did he feel this that only the other day he advised an intending candidate not to try for the London degree, but to go by preference to another university. He gave his advice as he should have acted himself.

Dr. POORE said that he did not sign the memorial of the medical graduates; but he intended to vote for the amendment, as he could not sanction the admission of women to degrees upon any "easy terms"; and as the Conjoint Board, which would shortly be in operation, would admit women to the medical licence, he did not think it necessary for the University to make a hazardous experiment.

Mr. R. H. HUTTON then rose to speak; but the meeting, which had been becoming gradually more and more excited, met him with cries of "Divide," and much cheering and counter cheering. Eventually, he was enabled to make a reply to a statement of Dr. Barnes, and asserted that Sir James Paget and Sir W. Gull were in favour of the resolution of the Senate. This was denied by Mr. Fowler, and by this time the excitement of the meeting became quite uncontrollable, and Mr. Hutton was compelled to sit down.

A division was then taken, when there appeared in favour of Mr. Savory's amendment 142, and against it 129. The amendment was then put as a substantive motion, and carried amid continued and loud cheering, by a majority of 28; the numbers being—ayes 144, noes 116. The debate lasted about three hours.

The other business on the agenda was then disposed of, and the Annual Committee having been balloted for, the proceedings terminated with a vote of thanks to the chairman.

THE ROYAL COLLEGE OF SURGEONS AND THE CONJOINT SCHEME.

AN extraordinary meeting of the Council was convened on Monday, the 7th instant, to consider the LATEST amended scheme for a Conjoint Examining Board for England, previous to its being laid complete, as to its essential details, before the General Medical Council, with a view of asking the sanction of the General Council to the union of the Apothecaries' Company with the other co-operating bodies. Several objections were raised to some of the details of the amended scheme, and several emendations proposed, but no material alterations were made. A report to the Council of the College, dated May 1st, from the chairman of the Conference of the representatives of the medical authorities, stated that the said authorities had agreed upon the constitution of the Committee of Reference, and also on the mode of nominating examiners. The report further recommended the addition of two notes to the scheme, one to the effect that none of the qualifications granted by any of the co-operating authorities shall be conferred on any person who shall not have been examined and approved by the Conjoint Board; the other to provide that if women be admitted to examination by the Conjoint Board, they shall not, on passing, be entitled to become licentiates or members of any of the co-operating authorities without the special permission of such authority. The Council also passed a resolution by which they are to have the exclusive right of applying the moneys allowed for the maintenance of the museum of the College. The Syndicate of the University of Cambridge announced the withdrawal of their proposal that the scheme should come to an end at the expiration of ten years unless renewed by special consent of the authorities.

THE VETERINARY DEPARTMENT OF THE PRIVY COUNCIL OFFICE.

THE annual report of the Veterinary Department was issued a few days ago. Dr. Williams, who was the secretary of the department for so many years, has been succeeded by Mr. G. T. Brown, and the present elaborate report was drawn up by him. The records of the year 1876 relating to the prevalence of contagious or infectious diseases of stock in the country present in important particulars a favourable contrast to those of the previous two years. Foot and mouth disease existed to such a limited extent that for some time it was commonly thought to be extinct. Abroad, however, it prevailed extensively. With regard to pleuro-pneumonia, much good seems to have been effected by the endeavours of the authorities to stamp out the disease; but it is deplored in the report that a large proportion of stock-owners do not act in concert with the officials appointed to carry out the necessary sanitary regulations. It is pointed out that outbreaks of disease often escape detection, and although power of entry is given to inspectors in cases where they have reason to suspect the existence of pleuro-pneumonia, it is seldom exercised. Glanders and farcy both maintained a comparatively high rate of prevalence last year, in spite of the regulations applied to arrest their progress. Sheep scab prevailed extensively in various parts of the country. It is said that this affection is readily curable, and never exists where ordinary care is taken to prevent its development. Sheep-pox was detected on one occasion in a cargo of sheep landed at Deptford, but no extension of the disease occurred. As the only sure precaution against the introduction of contagious or infectious diseases of animals from abroad, the slaughter or quarantine of all imported stock is advocated. The report contains much useful information, and bears evidence of having been prepared at a considerable expense of time and labour.

PRELIMINARY EXAMINATIONS.

To the Editor of THE LANCET.

SIR,—Of 75 candidates at a recent entrance examination, only 46 knew the genitive of *unus*, and only 48 knew the genitive of *idem*. Other candidates gave to *unus* for a genitive, *uni* (21), *unus* (2), *unui* (1); and to *idem*, variously, *idis*, *iis*, *idem*, *eodem*, *idjusdem*. These are but specimens, but they are not unfair specimens of the sort of knowledge too often presented by these schoolboys; knowledge, you will observe, relating to the very rudiments of the one subject to which all other subjects are habitually postponed in English schools. If you can find a corner for this letter, I hope that the journal read by schoolmasters, whatever it may be, will quote me from your pages.

I am, Sir, your obedient servant,

May 2nd, 1877. BETA.

THE LANCET.

LONDON: SATURDAY, MAY 12, 1877.

WE are pleased to be able to state that the members of the Convocation of the University of London have refused, by a decisive majority of 28, to "thank the Senate for their resolution to admit women to degrees in medicine." The advocates for the admission of women into our ranks have therefore been signally defeated in one of their strongholds, notwithstanding the urgent "whip" to which we adverted last week. The supporters of the motion in the Senate can no longer appeal to the votes of Convocation as agreeing with their policy, and Sir WM. JENNER will be the more certain that he is acting in accordance with the feeling and wishes of the majority of the members of the University in endeavouring to obtain the rescinding of the resolution of the Senate. It was a remarkable and significant fact that no medical graduate spoke in favour of the motion; whilst Mr. SAVORY'S amendment was urged on Convocation by such eminent medical authorities as Drs. WILKS, WILSON FOX, BARNES, and Sir WM. JENNER. Mr. SAVORY made a most eloquent speech, in which he pointed out that examiners with any delicacy of feeling would not examine women in certain details of anatomy, physiology, obstetrics, medicine, and surgery, and that consequently the value of the degree as a test of the highest efficiency would necessarily be impaired. This is a sufficient reason why such a resolution should not be accepted by the University of London; but, of course, the broader question of the physical unfitness of women for the general practice of our profession was referred to over and over again as an argument against their entering on a medical career. Mr. STANSFELD repeated his well-known, and we may venture to say only, reason—the truth of which, as far as this country is concerned, we beg leave to doubt,—that there are numerous women who wish to be attended by persons of their own sex. He, moreover, urged that we have no right to debar any woman from being able to carry out her own wish in the matter; but surely the University of London has some justification in refusing to alter its regulations in order to meet the vagaries of a few ill-advised ladies and their emotional supporters of the other sex. The question of their unfitness was practically allowed to remain unanswered, and is conclusive. It seems to us that, inasmuch as only an exceedingly small number of female graduates would ever pass the examinations and gain admission to the profession through the portals of the University, it is absurd for the authorities to change the existing arrangements, especially as it would do nothing towards really solving the great problem of how the surplus female population must find employment. If there is a great wish among the public for female doctors, and a supply forthcoming, the proper bodies to meet the want are the qualifying corporations, and not the degree-giving universities. It will be time enough for the latter to open their doors when the former have tried the experiment, and have shown that the demand is a true, and not, as we maintain, a spurious one. We think Mr. SAVORY'S amendment—"That this house is of opinion that it is undesirable for this University to admit women to degrees in medicine before it shall have considered the advisability of admitting women to degrees in all faculties"—a very felicitous one, and congratulate the profession on its being passed in such a crowded house, although we fear that the expression of so strong an opinion even will not have much effect on the ardent and enthusiastic believers in the equality and rights of women.

THERE is an ominous profusion of Medical Bills just now. No less than three are either in prospect or actually before the House of Commons.

There is, first, the Bill of the East London Medical Defence Association, introduced into the House and read a first time on May 2nd, and bearing the names of Dr. LUSH, Lord E. FITZMAURICE, Sir TREVOR LAWRENCE, Mr. GRANTHAM, Q.C., and Mr. CHARLES P. RITCHIE. The object of this Bill is to define more accurately than is done in the penal clauses of the Medical Act the offence of illegal medical and surgical practice. With this view it provides in Section 1 that—

"Section 40 of the said recited Act shall be repealed, and in lieu thereof it is enacted: Any person who for the purpose of any Act of Parliament, or for the purpose of gain, shall take or use any medical or surgical name, title, or description, unless such person's qualification or qualifications entitle such person to take or use such name, title, or description, and such qualification or qualifications be also registered, shall, upon summary conviction for either or any such offence, pay a sum of twenty pounds. And it is further enacted, that any person not already registered, or not qualified, at the time of the passing of this Act, to be registered under the said recited Act, who shall make, fill up, or sign any medical certificate for the purpose of any Act of Parliament, or who shall practise medicine or surgery for gain, unless such person holds a duly registered qualification or qualifications in both medicine and surgery, shall likewise, upon summary conviction for either or any such offence, pay a sum of twenty pounds."

Section 2 provides that any sum or sums of money arising from convictions under the Bill shall be paid to the treasurer of the General Medical Council. Section 3 provides for the recognition of respectable foreign diplomas.

Next, there is the Bill drawn by Sir DOMINIC CORRIGAN, to be introduced by Mr. ERRINGTON, which we have already noticed. The chief feature of Sir DOMINIC'S Bill is the proposal to establish a new examining board to be passed by all persons holding public appointments other than those of a military or naval character. Sir DOMINIC'S intention, indeed, is to provide a special examination for the civil medical service, comparable to that already existing for the naval and military services.

Thirdly, we have reason to believe that a Bill with which the profession is already familiar may be introduced at the instigation of the Parliamentary Committee of the British Medical Association, making it compulsory on the existing examining bodies to form Conjoint Boards in each division of the kingdom, and giving the General Medical Council power to make such schemes in the event of the bodies

failing to do so. Another important feature of this Bill is that it provides for the representation of the profession in the General Medical Council by giving six seats in this body to members chosen by the votes of registered practitioners. Other clauses provide amendment of the penal sections of the Act of 1858, and others give power to the General Medical Council to register foreign or colonial degrees that seem satisfactory to the Council.

Such are the Bills that are, or are likely to be, before Parliament in the course of the present session. It is scarcely to be expected, in the present condition of Europe, and with nearly all useful domestic legislation in a state of abeyance, that a question of medical politics will be carefully considered by the House. But the Government would do well to propose the reference of the question to a Select Committee. In the face of three Bills and of the more or less complete failure of the attempts to organise Conjoint Schemes, it is evident that the subject needs fresh legislation. It is equally evident that this should be preceded by some inquiry into the present state of the profession and the working of its various representative bodies. The existing system of medical examinations is confessedly unsatisfactory and absurd; it tends to injure rather than to promote medical education. The General Medical Council is pledged by its very nature to a support of all that is traditional in the present system of medical education and examination. The public is increasingly interested in everything that tends to raise the character of the medical profession. In these circumstances we venture to hope that the Government will refer the whole subject to a Select Committee, and so prepare the way for sound and satisfactory legislation.

IT is of the highest practical moment in science to discriminate between opinion and fact. Without anticipating the observations which it will hereafter be our duty to offer upon the evidence given before the Select Committee on the Lunacy Laws, we may be permitted to remark that a significant illustration of this truth is afforded by the mass of testimony, submitted as the ground for a legislative judgment, on that particular subject. The integrity and usefulness of the conclusions reached and the recommendations made to Parliament must directly depend upon the success with which the Committee achieves the difficult task of separating the wheat from the chaff. If the reports which have reached us through the lay press and other channels may be trusted, it is impossible not to feel that members of the House of Commons entrusted with this delicate inquiry will not derive great assistance from the distinction drawn between fact and opinion by medical witnesses. The wildest assertions have been made, the most sweeping and contradictory views propounded, in a fashion little likely to conduce to a clear perception of the problem, or to aid the Committee in solving it. Most of the authorities who have been consulted would appear to have started with the assumption that there was no sufficient ground for the investigation, but before leaving the room they have generally contrived to put the Committee in possession of some opinion or fact—in most instances the former—which must have gone far to show that, if merely for the sake of enabling the experts in lunacy to ventilate, and perhaps correct, their own judgments, the inquiry was expedient.

To mention only a few of the "revelations" which have been volunteered, we may note the following, premising that we can no more undertake to vouch for the accuracy of the reports circulated than to endorse the opinions said to have been expressed. The Select Committee has been told on high authority that no case of unjustified incarceration, or undue detention, in an asylum has occurred for many years past, that the treatment patients receive is excellent, the means taken for their recovery are unexceptionable, and, in fact, nothing remains to be desired. On what should be equally trustworthy testimony, it has been asserted that something like a third of the inmates of private asylums are not insane, that drugs are administered—wilfully or negligently—to their permanent detriment, and that a radical change is urgently necessary. The minutes of evidence will contain allegations that everything goes well in the licensed houses, while measures for cure are neglected or misapplied in public asylums; and, as a set-off to this startling representation, it has been stated that in the county and borough asylums alone, sufferers from mental disease enjoy the advantages of treatment, their condition in the private establishments being little better, from a medical point of view, than that of boarders in a well-conducted hotel.

These perfectly contradictory assertions may be taken as a fair sample of the sort of evidence from which it will be necessary to extract the information required for the Report. It can scarcely surprise the public if, unable to reconcile statements so antagonistic, the Committee should fall back upon the historic practice of compiling a presentable summary of the mass of testimony submitted, and leave the House and the community to draw their own conclusions. There is, indeed, another course open to the promoters of this inquiry, if they should feel justified in adopting it—namely, to abandon the original purpose, which, we take it, was to search out the *truth*, and allow the investigation to degenerate into a perfunctory proceeding, having for its only practical result the pacification of certain troublesome agitators and the general quieting of the public mind. We venture to protest against any such impotent conclusion to an inquiry long deferred and, when at last commenced, inaugurated with a show of business energy which gave promise of a complete and close scrutiny. If the terms of the reference are not sufficiently wide, or if it should be sought to give them an interpretation too restricted to admit of an exhaustive pursuit of the lunacy question into its many intricate recesses, it would be well that new instructions should be obtained so that, once for all, while the present inquisition is in progress, the social and personal aspects of one of the most important topics of the day should be rigorously interrogated. It will neither increase the repute of the medical profession nor advance the interests of the community, sane and insane, to allow the investigation to be hurried to a premature conclusion.

Up to a recent point the Committee has been very properly engaged with official testimony. Commissioners, visitors, medical superintendents, proprietors and medical officers of private houses have been examined, and doubtless

enjoyed an unexceptionable opportunity of confessing their faults and shortcomings, had they been so disposed. As might have been anticipated, the picture of lunacy practice painted by lunacy practitioners is not strikingly original. The disparaging statements made have in every case referred to a department of the system with which the witness was not immediately connected. Commissioners and visitors do not confess to having neglected their duty, or superintendents deplore mistakes or mismanagement, on their own part, injurious to their patients. The officers of public institutions do not recommend the policy of sending pauper patients to private establishments to ensure speedy cure, or gentlemen at present, o recently, interested in licensed houses, counsel the recourse to exclusively public measures for the cure of this national scourge. It will surprise no one that the evidence has not been characterised by more than common freedom from prejudice. We do not question the entire good faith and candour of every one of the witnesses giving conflicting testimony, but as their opinions will not admit of adjustment upon any other hypothesis, it must be inferred that minds imbued with the excellences of a particular mode of dealing with the insane, and naturally blind to its defects, glide insensibly into the conviction that what is must be right, and therefore any serious disturbance of the *status quo* ought to be deprecated. This is a traditional and not uncomplimentary interpretation, and we make no apology for offering it.

Within the last few days attention has been directed to the "patients'" view of the question, and it is clearly one which should not be disregarded. Persons have been examined who complain that they have been improperly confined. It is not for us to offer any opinion as to the accuracy of these allegations. The facility which the law clearly offers for mistake or malpractice ought to be considered in the light of such testimony as may be adduced. It is possible some of the witnesses interrogated on this topic may be weak, or even morbidly excited, and yet they may speak the truth on the main question. The Committee will do wisely to receive a reasonable amount of the testimony offered, and, except in cases of obvious delusion, to give it weight. It would be well to get to the bottom of the doubt as to the grounds of a judgment stigmatising people as unfit to retain their liberty. We venture to suggest that the Committee should ask the Commissioners to favour them with a sight of some four or five hundred certificates, taken at a venture from the archives of any half-dozen asylums, public and private. Other questions—for example, the subject of "chemical restraint," in plain words, quiet wards produced by the administration of chloral and opiates, the outcrop of the abolition of mechanical "restraint"—will repay investigation.

The whole subject of lunacy is ripe for investigation, and calls for scrutiny. Having regard to the results which have been obtained, directly and indirectly, from previous inquiries conducted by Select Committees of the House of Commons, we think the Legislature pursued a wise and politic course in devolving the duty of research on a body like that now sitting. It would not have sufficed to investigate special allegations of malpractice. Such a proceeding would have been unfair and unsatisfactory. The section of our profession engaged in lunacy has nothing to fear from the closest scrutiny. Differences of opinion of course exist, and the policy of public authorities, dealing with the insane, may need to be modified, but there is, we are convinced, no skeleton to be exhumed, and no dark disclosure to be effected. The results of the inquiry cannot be sensational; but they may be, in an eminent and unprecedented degree, useful. Bearing this in mind, if we may be allowed to make a suggestion, it shall be that witnesses before this Committee treat the questions addressed to them more as *bonâ fide* endeavours to elicit the full facts, and less as interrogations addressed to elicit damaging testimony. Judging from the reports which have appeared in the daily press, and rumours reaching us, there would seem to be a lack of explicitness about too many of the answers given, while the distinction between opinion and testimony to fact is not so drawn as to supply the basis of a solid judgment. General protestations of failure to remember a single instance of error or misadventure do not dispose of the question whether danger lurks in a practice. Wholesale denunciations of one method, and unqualified approval of some other, are not satisfying to the instinct of common sense. It is notorious that there are matters in connexion with the custody and treatment of the insane which call for amendment. Some at least of these require measures of reform which must be effected by the intervention of Parliament. The opportunity now offers for bringing these faults and grievances, with suitable suggestions, under the notice of the Legislature, through the Select Committee. We trust advantage will be taken of the medium, and the further testimony given will be less in the spirit of adverse witnesses, and more frank. If, as we have urged, the Parliamentary reference empowering the Select Committee is not sufficiently wide to include the whole subject, it should be enlarged, and, if necessary, some of the earlier witnesses recalled. In all probability many years will elapse before another inquiry is instituted, and it would be deplorable if the present were crippled, or curtailed.

IN the *Contemporary Review* for April is printed an excellent article on the subject of Spontaneous Generation. The author is happily not only popular in his style, but accurate in his facts and scientific in his methods of reasoning. Such a paper on such a topic is all the more welcome because popular addresses, wanting in accuracy and the scientific element, have done much to involve the serious questions concerned in greater difficulties. The writer, after a historical *résumé* of the subject up to recent times, says, in the settlement of the existence or not of spontaneous generation, the first point to be determined is, what matter is really dead? He answers the question: Matter may be made absolutely dead by submitting it to a sufficiently high temperature. The author next asks, How, if life be extinguished, can isolation from surrounding life be attained? It is very justly asserted, that only when "matters" are hermetically sealed in glass vessels through which "germs" certainly cannot pass, is isolation beyond question complete. This process of hermetical sealing was self-imposed by BASTIAN and most other supporters of generation *de novo*, "while PASTEUR and his disciples (TYNDALL among the rest) have

generally been content to use less stringent methods." Clearly, it is possible to kill living matter, to seal it in glass vessels hermetically when killed, and it should not be difficult to decide whether or not new life can be generated in infusions thus treated. Even the microscope is no longer necessary to decide whether vital changes occur, sufficient evidence of these being found if a translucent fluid grows turbid and putrefies.

In considering how "the balance of evidence inclines at present," weight must be mainly given to those experiments which have been confirmed, or which "have stood fire face to face with an adversary." In favour of spontaneous generation are numerous experiments made by Dr. BASTIAN prior to 1873, and which in that year were repeated by Dr. BURDON-SANDERSON in conjunction with BASTIAN. These experiments are known to our readers. They showed that various infusions behave variously, though treated similarly; that solutions which remained sterile at one temperature fructified at a higher (as, for example, urine, long supposed to be incorruptible after boiling and protecting); and that neutrality, or the degree of acidity or alkalinity of infusions, had the greatest bearing on the results obtained. We think it is not at all improbable that careful observation founded on the teachings of these experiments may ultimately clear away many of those mysterious differences which have occurred among experimentalists. SANDERSON'S repetition of BASTIAN'S experiments is detailed in *Nature* (July 8th, 1873), and he admits that his previous doubts had been dispelled. Abroad HUITZINGA confirmed the same experiments, and further found that by altering the proportions of his solutions he could keep the fluids sterile, though treated otherwise exactly as before, and justly concluded from this differential process that germs must have been killed and complete isolation obtained. COHN, of Breslau, also found that hay infusions would putrefy, when acid, after boiling for periods from fifteen to ninety minutes. Against the evidence of such observers it is reasonable to expect something more than denunciation and denial. We have felt bound, on one occasion at least, to deprecate, in respect of the questions in dispute, any method of argument which has not its origin in absolute facts, and we are glad to find a contemporary so ably dwelling upon the same point.

The evidence on the germ-theorist side is supplied by TYNDALL and PASTEUR. Their experiments are also well known to readers of THE LANCET. The latest contribution was made by Professor TYNDALL in January of the present year at the Royal Institution, a report of which we published. The writer in the *Contemporary* considers TYNDALL'S methods of procedure as roundabout rather than simple, and points out sources of fallacy—a criticism which Dr. TYNDALL will be prepared to accept after his reckless disregard of, or contempt for, the experiments of COHN, HUITZINGA, SANDERSON, and BASTIAN. TYNDALL'S experiments, recorded in 1877, differed from a like series, made and recorded at the same place, in 1876. In the latter infusions remained sterile in the most orthodox fashion; in the former they obstinately persisted in "breaking down." But even the first series of experiments did not quite accord with those of the man whom, above all others, Dr. TYNDALL accepts as a pattern: for neutral solutions, which, on the authority of PASTEUR, should have putrefied, remained barren. We would suggest that before attacking opponents, leaders so closely allied should attempt to explain their own differences. The army of the germ-theorists is divided; and it is generally believed that a divided army is worse than useless—it is dangerous to its own cause. It is clear that if those who take one side in a great question differ among themselves, and neglect to settle those differences, they must suffer from such a course, no matter whether generally their side is proved finally to be right or wrong. In the one case, their scientific collapse would be increased; in the other, unseemly disputes would arise. If "Inquirer" (the writer in the *Contemporary*) is correct—and we do not doubt his accuracy,—there must be among germ-theorists a communistic measure of free-thinking and argument. "The germ-theorists," he says, "are not quite agreed as to the answer to be given to the facts advanced by their adversaries." So each individual germ-theorist exercises his imagination, or resorts to denunciation. The time has come for plain speaking on this question, and we do not hesitate to say that it is not only a mistake, but scientifically wrong, for germ-theorists to allege against their opponents want of experimental power (without repeating the experiments of their opponents), want of scientific probity (a most serious charge), or what is more serious still, that they wilfully shut their eyes to the truth. We trust the day is far distant when such imputations will have any other effect than to damage those who make them.

We had no desire to open up this question again, admitting that it was unsettled, and willing to await the report of the Commissioners appointed by the French Academy on the desire of M. PASTEUR. But it was impossible to pass by the able article in the *Contemporary Review*, which so clearly defines the points in dispute, and their important scientific and practical bearings. They touch the whole range of Biology. The life of past ages, the evidences of such life now existing, the life of our own and future times, call, for various reasons, for a full and satisfactory settlement of the questions in dispute. These questions are widening day by day; they do not mean simply the killing of germs by carbolic spray in surgical operations, but the determination of some of the processes of creation, and the continuity or discontinuity of these processes throughout all time. Where such tremendous issues are involved, no one will remain satisfied unless the most absolute facts, and the clearest reasoning thereon, be brought forward. After reading the article in the *Contemporary*, we feel more than ever that there is need, amongst those who have made "germs" and "spontaneous generation" their particular study, of the greatest calmness, the greatest impartiality, the fullest examination of facts, and the endeavour to determine nothing absolutely until every side of the case has been overhauled.

In one year Dr. TYNDALL found infusions at the Royal Institution remain sterile; in the next year like infusions similarly treated fertilised quickly. Our readers know the methods of experiment adopted. Dr. TYNDALL ascribed the difference in results to the accumulation of old hay in the Institution, and to the abundance of germs springing therefrom in the atmosphere. Two germs could find their way

through plugs of cotton-wool into infusions where one could not. This is the conclusion to which Dr. TYNDALL must have come in reality, and an unprejudiced outsider cannot but wonder how such conclusion was made. Can germs marshal their forces like armies of men? We certainly agree with "Inquirer" that Dr. TYNDALL'S "hypothesis admits of difference of opinion," and that if Dr. TYNDALL'S conclusions made when the germs in the air were few are accepted, we are bound to question his conclusions made when germs were numerous — that is to say, hypothetically numerous. "Inquirer" believes that "in the balance of evidence as it now stands there seems little to justify a doubt that organic substances, after being raised to a temperature of 212° Fahr., will often produce life though protected from all access of germs from without." To prove that this life results from spontaneous generation, it is necessary to prove that a moist temperature of 212° is enough to kill, not only bacteria, but any germs which they may throw off. The death-point has been investigated by BASTIAN, and, though his experiments have not been repeated, his results are such as germ theorists cannot afford to despise. In fact, until they are disproved, all arguments to the contrary are absolutely useless. BASTIAN asserts that in turnip, hay, and other infusions, germs are killed by a temperature at the outside of 158° F. Infusions thus heated, and then protected, remained pure, but on the addition of a putrefying fluid changes immediately commenced in them. Infusions prepared with care in the respects above mentioned, similarly heated (or heated to far higher degrees), similarly protected—in a word, treated identically—did not remain pure. "Coupling these results, the fact of spontaneous generation would follow as a mere matter of logic," says "Inquirer," and we do not see how anyone can refuse to acquiesce in these words or in the opinion that experimental confirmation is needed before the final verdict should be given. PASTEUR asserted in 1862, and still asserts, that 100° Cent. of heat will kill germs in acid urine, but that neutral solutions require a higher temperature for sterilisation. BASTIAN met this assertion. He boiled urine in the acid state (and thus killed the germs), and neutralised it afterwards with boiled potash; still the liquid afterwards swarmed with new life. We have already alluded to these experiments, and to their repetition by PASTEUR, who admitted the facts, but maintained that the results were due to germs which survived boiling in liquor potassæ. This is where the case now stands, and to settle it a Commission has been appointed in France, to which we shall not further allude than to say "Inquirer" seems to hold opinions very similar to those expressed in an annotation in a recent number of THE LANCET. The time has gone by for other than plain speaking in this matter, and PASTEUR cannot complain of criticism after his expression of condolence with BASTIAN "on his approaching condemnation" in the letter which we lately published. The article in the *Contemporary* we most heartily commend as plainly yet scientifically written, and evidently as an attempt to induce a useful marshaling of the forces on each side. "Inquirer" all but advises Dr. TYNDALL to drop out of the question his previous experiments, and to begin afresh; and we venture to repeat the advice, not from any disrespect, but in the hope that by such a proceeding his genius will better, than by his present plan, help to solve and settle the questions to which he has given so much time and talent.

WE mentioned a week or two ago a movement which has been set on foot with a view to realise the idea we broached some years since proposing the establishment of hospitals for the well-to-do, and the steps which were being taken to carry the scheme into effect. The advocates of the scheme have lost no time in bringing their views before the notice of the public, and a deputation waited upon the Lord Mayor last Friday to set forth the desirability of establishing such hospitals, and to ask him to convene a public meeting with the view of arranging and promoting the plan. The deputation consisted of some influential city men, and the general purpose was supported by letters from members of the profession, setting forth the benefits which would result from the establishment of such institutions. The Lord Mayor has consented to preside at a meeting at the Mansion House, which is fixed for Wednesday, June 27th.

We have so often insisted on the necessity for such hospitals, and their adaptation to one of the great wants of the present day, that we cannot but hail the adoption of this plan, in principle at any rate, with satisfaction. We have shown that there exists a class which is ill-supplied with hospital accommodation, though in far better circumstances than those who are well off in that respect; that for many such entrance to a general hospital is an impossibility; and that others do so enter with some sacrifice of self-respect, and commit an injustice to those for whom charitable hospitals were designed. Whatever may be the sins to be charged to the Charity Organisation Society, they have no doubt done some good in this matter, and they should be strong supporters of the present scheme.

So much for the necessity and the want, which, being felt both by the public and the profession, call for some remedy. We have before considered the relative advantages of separate hospitals, and of the adaptation of parts of existing institutions. We confess to a preference that the general hospitals should take this matter up seriously, but there are difficulties of many kinds, in London at least, which may debar them from moving in the matter. And this being the case, it would seem undesirable to wait for their initiative. When they see that the plan can be made to work and to pay, they may be trusted to follow in the same direction.

The scheme submitted by Mr. HENRY C. BURDETT sets forth the following objects:—

1st. To provide hospital treatment, skilled nursing, a convalescent institution, and other accommodation, for the benefit of all classes, when attacked by illness, who can afford to pay, and for the assistance of the medical profession generally.

2nd. To provide, furnish, maintain, and regulate such buildings with fittings and conveniences for the benefit and comfort of patients and others.

3rd. To co-operate with the managers of the present hospitals supported by private charity, with the object of preventing the abuse of hospitals by people who can afford to pay for their treatment.

4th. To provide for the assistance of the medical profession, and for the benefit of the public, a well-regulated hospital, to which the former can send with confidence private patients who can afford to pay adequately for the

accommodation which they require, and in which the patients will have the advantage of being treated by their own doctor.

It is, in fact, proposed to form a Home Hospital Association, on the model of the Industrial Dwellings Company.

With the details of the idea thus sketched out we have nothing to do so far as their financial organisation is concerned. Its successful working must eventually depend on its acquiring the confidence and support of the profession as well as the public. As yet the scheme is only in outline, and its ultimate character and development are uncertain; but by thus early submitting their proposal to the medical profession, and considering their views, the movers have given the best guarantee of good faith, and have taken the best course to ensure their success. It is now for the profession to see how far its development will be in accordance with the interests of both doctors and patients. On a future occasion we shall point out some of the evils to be avoided, and the details needful to ensure success.

Annotations.

"Ne quid nimis."

THE GENERAL MEDICAL COUNCIL.

THE Council opened on Thursday with a somewhat long but not uninteresting account of the action of the Executive Committee of the General Medical Council since its last meeting, and of various questions of importance to the Council and the profession which have arisen since then. The great question of education came in very properly both at the beginning and the end of the President's address. His suggestions on the matter were based chiefly on words spoken thirty years ago by two eminent men, subsequently both Presidents of the Council—viz., Mr. Green and Sir Benjamin Brodie,—which, as words of a general nature, it would be difficult to improve upon. But the time—with all respect to a doubtful remark to the contrary by the President—has gone by for generalisations on this subject, and the Council is face to face with it as a question of detail. It has had twenty years of experience as a Council of Education; it has, at a great but not unreasonable cost, visited the various medical examinations of the kingdom; it has had returns for many years of the disastrous results of these to candidates; it has taken the opinion of the examining bodies themselves as to the significance of these results; and it remains for the Council now to do, what Sir Benjamin Brodie did not do—point out precisely what are the defects and faults of the prevailing system of medical education. We shall soon know whether the Council is able to apply its unprecedented knowledge on this subject, and to view it in a critical and independent spirit. Meantime it was gratifying to us to hear Dr. Humphry, the chairman of the Committee appointed to consider the question of rejections at the Professional Examinations, arguing on Thursday that the Council should devote its strength this year to the question of medical education.

The mere enumeration of the subjects which have engaged the attention of the Executive Committee of the Council would show that the office of the President and his colleagues of the Executive is not an idle one. It would serve to show, too, that the Council will have to elect between leaving much of its work to be done by the Executive Committee, and sitting occasionally more than once a year.

CHOLERA PROSPECTS.

FURTHER news from the East confirms the information already given in THE LANCET of the wide prevalence of cholera in Afghanistan, and of its late, if not present, large dissemination in Baluchistan. As yet the disease is not known to have passed the frontier and entered Persia, but the probability of its extending in this direction is not to be disregarded, and should that country again suffer it is to be feared that Europe will not escape another invasion of the pestilence. In view of this threatened danger the proceedings of the last meeting of the Epidemiological Society had a peculiar interest. The meeting was devoted to an adjourned discussion on a paper by Inspector-General Lawson, relating to the cholera epidemic of 1875 in India, and to the consideration of a paper by Dr. Ely McClellan, of the United States Army, on the cholera epidemic of 1873 in North America. Inspector-General Lawson's paper, in fact, dealt with the beginning of that development and dissemination of cholera of which we are most anxiously watching the northerly extension in the countries intervening between our Indian frontier and Persia. Dr. Ely McClellan's paper dealt with the unsolved question of the mode of introduction of cholera into, or of its origin within, America in 1873. The proceedings of the meeting had a further special interest in that Dr. Cuningham, the Sanitary Commissioner with the Government of India, was present, and took part in them. In fact, his presence gave a particular tone to the discussion, which it is desirable, at the present moment, should receive attention.

It is well known that Dr. Cuningham, as the result of his large experience in India, has come to conclusions as to the mode of diffusion of cholera diametrically opposed to those which have been arrived at by the great majority of European observers. To the present, for example, notwithstanding long continued and special inquiries directed to this question, he has seen no reason to believe that in India, as commonly held in Europe, persons suffering from cholera are the essential agents in the dissemination of the disease. In other words, he disbelieves, as the result of his researches, that cholera is (in ordinary medical language) either "contagious" or "infectious." On the other hand, European and American opinion, as the result of the study of the movements of the disease beyond the boundaries of India, concur generally in the conclusion (to use a phrase of Mr. Simon's) that "human contagion is the one active power in the international spread of cholera." This is, it must be remembered, a question altogether different from that of the conditions which favour the growth of the assumed "contagion," or which render it sterile. Now, the Society, seizing upon this cardinal difference of opinion, and assuming that there can be no essential difference in the mode of spread of cholera in any part of the world, raised the question as to how far the antagonism of opinion might rest upon differences in the methods of observation pursued in India and in Europe. Observing that another great epidemic of cholera was probably in progress, and that Europe, now quite free from the disease, might soon be invaded again, it was held that the opportunity would then occur for correcting, under favourable circumstances, any error of method which might exist among observers here. Hence it was suggested that it would be well to take advantage of Dr. Cuningham's presence in England for epidemiologists to confer with him with a view to determine by actual observation, when the time should come, the source of the apparently irreconcileable differences which at present exist between his conclusions and those of European observers. The Epidemiological Society, in this respect excellently sustaining its scientific aims and reputation, proposes to

make an arrangement for such a conference as is here referred to.

As an anticipatory contribution, so to speak, to the solution of the question here raised, Dr. Ely M'Clellan's paper had much value. Our readers will remember that the researches made into the history of the beginning of the epidemic of 1873 in America, at the time of the outbreak, failed altogether to find a clue. So completely did the efforts made to discover an introduction from a foreign country fail, that the State Board of Health of Louisiana, in which State the disease first showed itself at New Orleans, doubted whether the disease were epidemic cholera at all, as a local origin of that disease seemed inconceivable. Dr. Ely M'Clellan, as editor of the well-known official report of the epidemic throughout the United States, made further researches into the subject, and discovered that there was a fatal flaw in the original investigations made in New Orleans. He discovered, in fact, that the evidence which had been accepted by the State Board of Health as to non-introduction of the disease was untrustworthy, and that the investigation on this cardinal question was of no scientific worth. It was impossible at the time of his own inquiry to recover the clue, but the failure to ascertain the introduction of cholera into America in 1873 is, as he shows, not to be regarded as a proof of "local development" of the disease, but simply as an instance of defective research. By a singular typographical freak in the American official report this important conclusion is made to appear as the result of the work of another gentleman, and not of Dr. Ely M'Clellan. We are glad to have the opportunity of giving due honour to the latter gentleman in this matter.

THE WESTMINSTER HOSPITAL.

SIR RUTHERFORD ALCOCK, in his letter to *The Times*, on the subject of the removal or non-removal of the Westminster Hospital, makes good use of the figures which appeared first in our columns, and which we certainly think prove conclusively that there is a need for a hospital in the present situation. The committee talk of spending £15,000 in altering the present building, and a knowledge of architects' estimates makes it probable that that sum will be exceeded. We are not at all prepared to say that they are taking a right course in risking so large an expenditure on a building which, although only some forty years old, was built at a time when architects were even less troubled than at present with any notions of scientific principles. The alterations at St. George's and St. Mary's are appealed to as evidence that it is possible to alter old buildings, but we are decidedly of opinion that the alterations at both these hospitals conclusively prove that with them reconstruction would have been the proper course. Neither St. Mary's nor St. George's can ever be made hygienically perfect as hospitals should be while the present form of structure is retained. Dr. De Chaumont's report on St. Mary's after the alterations shows most conclusively that the ventilation, of some at least of the wards, is still very far from perfect. All authorities on hospital construction are agreed that buildings for the reception of the sick must be planned on principles which are well understood, and we think it a matter of great regret that such large sums have been spent in altering St. George's, St. Mary's, and Charing-cross hospitals. They are improved, we admit, but they are very far from what they ought to be. It is a pity that the money was not rather spent upon the reconstruction of at least a part of the edifices on a new and scientific plan, which might have been added to as occasion required and funds permitted. It is unwise, we think, to fritter away the subscriptions of the public on tinkering alterations. The present Westminster Hospital may be improved, but must, as planned at present, always remain a second-rate institution from a sanitary point of view. The authorities are going to act wisely in adhering to their site. Why do they not try to erect thereon a new hospital, which may approach to hygienic perfection?

THE FAMINE IN INDIA.

THE dreadful famine now pressing so heavily on our fellow-subjects in Southern India has called forth a most spirited pen-and-ink encounter between Sir Richard Temple, K.C.S.I., the famine delegate from Bengal, and Dr. Cornish, the sanitary commissioner of Madras. It may not be in the remembrance of most of our readers that in 1874 a similar famine, only not nearly so severe, afflicted Bengal, and for the measures then taken for its prompt relief, although, in the opinion of many well able to judge, something like three or four millions of money were unnecessarily spent, Sir Richard Temple was made a baronet. The great experience gained by him on this occasion induced the Government of India to send him to Madras to assist the local administration in taking measures for the relief of the present sufferers. Sir Richard, evidently anxious to avoid his former mistake of extravagance, had laid down a scale of diet which, in the opinion of Dr. Cornish, the sanitary commissioner of Madras, was quite inadequate to maintain life. Dr. Cornish accordingly felt it his duty to draw the attention of the Government to this inadequate diet, founded, as he remarks, upon the individual opinion of Sir Richard, unsupported by any evidence, scientific or otherwise. This, of course, led to a rejoinder from the baronet, who, in a somewhat flippant manner, affects to laugh down the mere "scientific argument" of the sanitary commissioner, and ends by adhering to his scale of one pound of grain per diem, which he thinks might be sufficient to sustain life, and which, at any rate, *may be tried for a week or a fortnight*, and if then found insufficient, the point could be reconsidered. To this Dr. Cornish sends a masterly rejoinder. In the first place he confutes Sir Richard Temple from his own mouth as to the adequacy or not of the scale of diet now proposed, for in 1874 Sir Richard himself, after "due consideration and discussion," arrived at the conclusion, and published that conclusion, that one pound and a half was the *lowest* diet on which an adult could possibly be supported. Dr. Cornish then points out that the nature, quantity, and quality of food of the various classes of the people of India formed the subject of an important statistical inquiry undertaken in India in 1863, extending over the length and breadth of India, which inquiry was forwarded to the Secretary of State for India, and by him published for the information of all the Governments concerned, so that the opinion now expressed by the sanitary commissioner is not one that either rests upon his *ipse dixit*, or is of recent formation, but is the outcome of the inquiry alluded to, carried on by a host of intelligent men, and sanctioned now by the result of many years' trial. He then alludes to his present experience gained by the examination of numerous relief gangs, and points out that the mortality is so high, that an experiment carried on, as Sir Richard suggests, for a week or a fortnight, will end practically in the destruction of the people afflicted; for, to use his own words, the present enormous mortality "simply means an annual death-rate equivalent to 930·8 per mille of the population constantly under observation, and, in fact, is a death-rate which wipes out nearly the whole of the living within a year." The whole paper will amply repay perusal, and is one of which the author, already well known from his previous good work in sanitary matters, may well be proud. The Madras Government is to be congratulated on having had at hand an officer so well able to afford them sound

advice, and to save them from a policy which, if carried out as recommended by the Bengal baronet, would have ended in a mortality which would have seriously compromised the reputation of the English Government for humanity.

REGISTRATION AND EDUCATION OF MIDWIVES.

THE Obstetrical Society of London has been engaged with this subject for several years, and we are heartily glad to see that its labours are likely to be crowned with success. On Friday last a deputation from the Society waited on the Lord President, the Duke of Richmond, and laid before him a scheme drawn up by the council of this Society for the education and registration of midwives. This scheme provides that all midwives shall be trained nurses, competent to attend natural labour and to recognise unnatural presentations, registered and allowed to practise in certain defined districts, and be under the supervision and control of the medical officers of health for such district. It was proposed that this scheme be made the basis for legislation on this subject, and be incorporated in a Bill to be brought before Parliament, or in the Medical Act. His Grace readily agreed to the wishes expressed by the deputation through the President of the Society, and undertook to lay the scheme before the Medical Council, that it may report upon it. The importance of the subject can hardly be over-estimated, as many thousands of poor women in England and Wales are annually attended in their confinements by self-styled midwives, who are utterly ignorant of the simplest rules of midwifery, and who are responsible to no one for their conduct. Recent disclosures have shown the great need of change in these respects. Should the provisions of the scheme drawn up by the Obstetrical Society become law we may hope to see not only a better educated but also a better class of women becoming midwives.

THE WAR.

A READER of the Russian newspapers, as he peruses the abounding instances of Christian charity, prompted by the war, there given to light, can hardly help thinking, with the "pious editor" of the "Biglow Papers," "that bombshells, grape, an' powder 'n' ball air goodwill's strongest magnets," and "that peace, to make it stick at all, must be druv in with bagnets." The paradox is tough, although not new; but happily it is not our function to attempt to solve it, but simply to relate the news that suggest it. The municipality of St. Petersburg (pending, apparently, its own particular action) has opened a subscription for the wounded at the City Hall. The municipality of Moscow is organising in that city, and will maintain during the war, in concert with the Red Cross Society, 1000 beds for the wounded. It has also contributed one million roubles for the sanitary welfare of the army in the field. The ladies of Nijni-Novgorod are forming a corps of sisters of charity and hospital assistants. The peasants of the canton of Malo-Arkhangelsk (Government of Orel) have determined to establish 30 beds at the *mairie* for the sick and wounded in case of need. The proprietary of the tramways in St. Petersburg set aside the total receipts of the 29th of April for the benefit of the Society for the Relief of the Sick and Wounded of the Army in the field. The corporation of the artisans of Moscow have given 15,000 roubles for the sanitary wants of the army, and propose to establish and maintain during the war 60 beds for the sick and wounded. The nobility of the Government of Moscow have voted 80,000 roubles for the organisation of an ambulance of 100 beds for the army of the Caucasus, and a subvention of 15,000 roubles for the military hospitals of the Government of Moscow. The applications of Russian and foreign surgeons to be sent to the seat of war exceed all present requirements of the army. The receipts of the Russian Red Cross Society from the 27th December to the 26th April were 56,127 roubles. The subscriptions received during the two days the 27th and 28th April amounted to 5821 roubles, making a total within the dates given of 61,949 roubles; The English Club in St. Petersburg has contributed 5000 roubles to the aid of the sick and wounded, and the Jewish community have organised a committee for collecting subscriptions among their compatriots for the same purpose. Contributions from all parts of the empire to the value of 52 200 roubles have been sent to the Russian Red Cross Society for the relief of the Slav population of the Balkan peninsula. On the 29th April a special address, couched in the most enthusiastic terms, was read from all the pulpits of the Evangelical churches of St. Petersburg, calling upon the congregations to contribute to the formation and maintenance of an ambulance of, at first, 50 beds, to be placed under the direction of the Red Cross Society. The municipality of Cronstadt has contributed 50,000 roubles in aid of the sick and wounded. This is a long, but, we believe, imperfect list.

During the visit of the Emperor to Kischinev he visited the temporary military hospitals there and the Kischinev ambulance.

It is painful to turn from this display of active beneficence in Russia directed towards the relief of the more immediate evils of the war to the absence of any corresponding movements in Turkey. According to a correspondent of the *Geneva Journal*, a futile attempt has been made in Constantinople to promote a Red Cross movement. Turkey must apparently depend chiefly, if not wholly, upon the Red Cross societies of other countries for supplemental aid for her sick and wounded.

Captain Burnaby, at a recent meeting held at Sutherland House, gave a distressing account of the insufficiency of the provision for the medical and sanitary care of the Turkish forces seen by him in his recent tour in Asia Minor. He augured the worst for the hygienic future of these troops in a protracted campaign.

OUR CANAL POPULATION.

FROM Mr. Harry Leach's last half-yearly report, the general character of which we discussed last week, a very interesting insight is obtained into the condition of such of our canal population as visit the canals and the river Thames within the metropolitan area. The information is very timely, as several important questions concerning this population are likely soon to occupy Parliament, the President of the Local Government Board being about to lay upon the table of the House of Commons a Bill relating to them. In the course of the period to which the report refers, and under Mr. Leach's instructions, Inspector Lewis, of the Port of London sanitary staff, made a special inspection of the canal boats, and the population living in them at the time, within the limits of the port. The results of this inspection are given in the report. It appears that an average of eighty of these boats, or thereabouts—"monkey barges" so-called—are at all times moored in the port. Seventy-five of these vessels were inspected, and it was ascertained that the average cubic space of the cabins of a "monkey barge" is about 280 *ft.*, and that in such space there may be, and frequently is, housed a family of from three to seven members of all ages and of both sexes. "Boys and girls of from twelve to twenty-one years of age," writes Mr. Leach, "are found living together in these floating cupboards. Children are frequently found

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in them, and the inspector has recorded a case in which small-pox was introduced, and attacked all the inmates (nine in number), who, nevertheless, remained in the barge during their illness. My own practical experience, however, of these small craft coincides with that of the inspector, who reports in every case they were very clean." The treatment of the floating population of men, women, and children on these vessels, some 15,000 in number, according to the last census, is, Mr. Leach remarks, to a great extent a School Board question, but it has also important sanitary aspects. The "monkey barges" are often carriers of contagion from one district to another, and the Sanitary Act is inefficient for the proper control of this evil. The general condition of existence of the people on board, apart from the moral aspect of the question, and notwithstanding large exposure to the open air, is inconsistent with their sanitary welfare.

THE WORK FOR THE GENERAL MEDICAL COUNCIL.

EVERYTHING tends to show that the General Medical Council has before it an amount of work which cannot be done in the course of an ordinary session, and that it has to choose between either not doing its work and prolonging its session or having another later in the season. The subjects we noticed last week are of sufficient complexity to occupy a week, and, as they stand over from last meeting and are of prime importance, they should be taken first. But they are only a few of a score or two of subjects that must engage the attention of the Council. Amongst others is that of the registration of honorary degrees, in regard to which, as our readers know, the Council is in the delicate position of having refused to register the honorary degree of one university while it has on its Register the honorary degrees of others, held by some of its own members and ex-members. There seems a great probability, too, that the question of the efficiency of preliminary examinations will again be raised. Much attention was bestowed on this years ago, and it was thought to have been satisfactorily settled. But evidence from every quarter—from Scotland, Ireland, and England—goes to show that in the professional examinations some candidates evince the greatest ignorance in subjects of general education. It is to be hoped that, in any fresh legislation on this matter, care will be taken to secure at least a thorough knowledge of English—if we may not hope of the English classics, at any rate of the English dictionary. The first programme of business includes thirty-four subjects!

THE EDINBURGH UNIVERSITY CLUB.

THE Quarterly Dinner of this Club took place on Wednesday evening last, at St. James's Hall, under the genial presidency of Professor Blackie. The visitors were Sir Daniel Macnee, P.R.S.A., Sir Patrick Colquhoun, Mr. Hepworth Dixon, Mr. Bryant, Dr. Silver, Dr. Colan, and Dr. Lockhart Robertson. Under the agreeable effect of good speaking and singing, and good stories by Sir Daniel Macnee, the night passed quickly away. Professor Blackie, in characteristic eloquence, showed the advantages of the system of the Scotch Universities, not concealing his opinion of the defects of the Scotch educational system, the worst of which he considers to be the absence of good secondary schools. Dr. Colan gave an interesting account of his experience as surgeon of the *Alert*, referring especially to the deadening influences of low temperatures, and the injurious effects of the absence of fresh meat and vegetables. Dr. Gairdner, of Glasgow, a member of the Club, proposed the health of the guests.

SMALL-POX IN WORKHOUSES.

THE recently issued Quarterly Return of the Registrar-General records a slight outbreak of small-pox in Hungerford, which is noteworthy. The disease is said to have been imported from London; at any rate, eight deaths were referred thereto during the quarter, all of which were recorded in the workhouse. The registrar remarks that no cases existed in his district at the close of the quarter. The most unusual feature of the outbreak was that four of the eight fatal cases were of persons aged 68, 77, 83, and 84 years respectively. This appears to be a striking instance of the danger to be always apprehended from the admission of cases of infectious diseases into workhouses; for it seems improbable that these four aged people should have become infected elsewhere than in the workhouse. The situation and arrangement of the infectious wards at the Hungerford workhouse must be open to the gravest objection if the aged pauper inmates are exposed to the danger which appears to have caused the four deaths. The union of Hungerford constitutes a rural sanitary district, with a population of about 20,000 inhabitants, and it may be hoped that the guardians will now see the desirability of establishing a hospital for the isolation and treatment of cases of infectious disease, detached, if not quite apart from the workhouse. It ought not to be tolerated that pauper inmates should be exposed to unnecessary risk by the admission of cases of small-pox, typhus, or other such highly infectious diseases.

THE CHAIR OF ANATOMY AT UNIVERSITY COLLEGE.

THE contest for this chair, which has been lately vacated by Professor G. V. Ellis, would seem to lie between Mr. Thane, who has been the senior demonstrator at University College for the past seven years, and Mr. J. C. Ewart, M.B., who was a demonstrator of anatomy at the University of Edinburgh, but who has lately been in charge of the museum at University College. It is, of course, important that, besides a knowledge of his science, the selected candidate should be able to teach well, and stir up the enthusiasm of the pupils, and there can be no doubt that Mr. Thane has shown that he possesses all these requisites. We hope that, in the interests of the College itself, the candidate will be elected who has shown himself to be a most capable and popular teacher.

THE PLAGUE.

WE regret to have to state that the news of the appearance of plague at Resht is confirmed. The particulars of the appearance of the disease there, and of the extent of its prevalence, are still wanting, but the fact is one of which the gravity cannot well be exaggerated. Whether the outbreak be an off-shoot of the continuing prevalence of the disease in Mesopotamia, or a new development of the malady, it proves that the conditions favourable to the extension of plague are becoming manifested over a much wider area than has hitherto been observed since the reappearance of the disease on the Lower Euphrates in 1873, and suggests that the epidemic may be about to enter upon a more active phase of diffusion. If we refer to last year's official report of the medical officer of the Local Government Board on the modern history and recent progress of plague, it will be noted that, in respect to the present prevalence of that disease in Mesopotamia, it began in 1873-4, in a circumscribed outbreak on the left bank of the Lower Euphrates; and that in 1874-75 the disease reappeared in the same district, and spread over a much wider area, but that none of the greater centres of population were attacked.

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From other sources we know that in 1875-76 the disease again showed itself in Mesopotamia, extended over a still wider area than in the two previous years, attacked the chief towns, including Bagdad and Hillah, and spread into south-western Persia, appearing at Shuster. Now, thus early in the present year, when plague has again become active in Bagdad and the vicinity, we learn its presence practically on the southern coast of the Caspian, in the principal seat of commerce between Persia and Russia, at Resht. This steadily and, as it would seem, rapidly extending area of prevalence of the disease cannot be regarded without anxiety—at least for the seat of war in Asia Minor, one of the latest haunts of plague before its apparent cessation throughout the East, if not for Europe.

AN HISTORICAL CASE OF IMPALEMENT.

As the diagnosis between real and counterfeit impalements has of late, *à propos* customs Turkish, attracted much attention, a *bonâ fide* record of a case of such torture may not be without interest. In the valuable ethnological collection preserved in the Cabinet of Comparative Anatomy at the Jardin des Plantes, Paris, may be seen the skeleton of an adult male, presented by the celebrated military surgeon, Baron Larrey. It is all that remains of Solymanêl-Hlabeg, a young Syrian, who assassinated General Kleber in Egypt. For this offence he was condemned to be impaled after that his hand had been burnt to the bone. On a label attached to the skeleton it is further stated that the stake, "after lacerating the viscera of the abdomen, their nerves and vessels, had fractured the os sacrum, two of the lumbar vertebræ, and was finally implanted in the vertebral canal." It seems more than probable that Larrey not only witnessed the punishment, but also made a careful examination of the assassin after death.

UNCERTIFIED DEATHS.

AT an inquest with reference to the death of an old lady at Tywardreath, who died of spitting blood, and had no attendance other than that of a chemist, the coroner impressed on the jury that none but a qualified medical man, who had seen a patient *alive*, could sign a certificate of death, and where this was not forthcoming, inquests were inevitable. This seems to us at once common sense and good law. The theory of our registration system is that the registration authorities should be informed and satisfied as to the nature of the cause of death in any given case, and that this information can only come from one of two sources—either a registered medical man or a coroner's jury. Where it is not to be had from the first source, it should be forthcoming from the second. If we had a few more coroners like the coroner of Tywardreath, we should soon hear less of uncertified deaths.

WANTON CARELESSNESS.

A CASE is reported in which a little girl, in some unexplained manner, became possessed of a piece of dynamite, which she exploded in a national school-rooom, blowing off several of her fingers, and doing other damage. Nothing is known, or, perhaps, we ought to say stated, as to the circumstances under which this terrible agent came into the possession of a child. There must have been gross carelessness somewhere. Familiarity with danger certainly breeds contempt of prudence. Not only do those who have occasion to handle powerful explosive and combustible substances in the way of business grow indifferent to the peril attending their use, but they cease to care for the safety of others. Probably this infant picked up a fragment of dynamite which some person engaged in blasting operations had dropped; or it is conceivable that in transporting the explosive, as such agents are too commonly carried from place to place, a portion of the substance became detached, and was deposited in a thoroughfare. Public opinion is powerless to convince those who have the custody of these potent agents that they owe it to the community not less than their own personal safety to observe proper precautions. It is apparently useless to urge attention to this plain duty. A reckless defiance of danger is more captivating to weak minds than the modest and sensible avoidance of needless risks.

UNIVERSITY COLLEGE HOSPITAL.

THE Annual Dinner fixed for next Wednesday, and at which Sir Henry Thompson will preside, is expected to bring together a large gathering of the former pupils of University College. It will be advisable for those who intend being present to signify their intention beforehand in order that suitable provision may be made. Sir Henry will, no doubt, put in their true light the relations which ought to exist between the public and an institution which is at once a charity and an important centre of medical education. A certain section of the "charitable" public has striven to show that medical schools are against the interests of the sick poor; but we are certain that the feeling arises from want of knowledge, and any misapprehension of this kind can be removed by a speaker who, in addition to considerable powers of eloquence, has that knowledge which long service on the staff of a hospital alone can give.

SURGICAL APPOINTMENTS AT KING'S COLLEGE.

WE hear that the Council of King's College have definitely offered to Professor Lister the chair of Clinical Surgery, and it is rumoured that he will accept their offer. Mr. Wood will have a specially endowed professorship given to him, and the chair of Systematic Surgery will be advertised. In this case, the present junior surgeons and some old King's College students are mentioned as probable candidates. To facilitate these important changes, a new surgical ward will be opened at King's College Hospital.

MR. WILLIAM COULSON, F.R.C.S.

WITH sincere regret we record the death of Mr. William Coulson, one of the oldest members of the profession. The deceased gentleman had a reputation extending over more than half a century, and linking his name with the history of surgery in an era of great interest and moment. The profession has sustained the loss of a loyal and warm adherent. An obituary notice will appear next week.

REFLEX MOVEMENTS AFTER DECAPITATION.

AT the execution of Billoir in Paris some days ago, one of the legs moved after the separation of the head from the trunk by the guillotine. Some people are unscientific enough to urge that this was an indication of suffering, in apparent ignorance of every day experiences that reflex movements often occur after decapitation. These are, of course, much more common and persist for a much longer time in animals, especially in cold-blooded ones, but they are by no means unknown in man, and we need hardly say afford no evidence of emotion, or even sensation.

THE SIMPSON STATUE.

SATURDAY, the 26th inst., has been fixed for the unveiling of the statue of Sir James Simpson in the West Princes-street-gardens of Edinburgh. The work—a *chef d'œuvre* of Mr. Brodie, which for some weeks has stood completed in

his studio—will be mounted on its pedestal within ten days. The ceremony will, we doubt not, be worthy of the occasion—the addition of another to the line of Scottish heroes along the noblest thoroughfare of the "grey metropolis of the North."

THE MEDICAL COUNCIL AND REJECTIONS AT PROFESSIONAL EXAMINATIONS.

THE profession will see with satisfaction that the Council has determined to commence on Saturday to discuss the answers from medical licensing bodies to questions proposed to them by the Executive Committee in regard to the results of the professional examinations and the deficiencies in preliminary education, and Dr. Humphry's report to the Executive Committee on these answers.

THE Kingsbridge Board of Guardians, according to the *Western Morning News*, was engaged last Saturday in the investigation of a case which appeared of a rather serious nature. About a fortnight ago a sick German seaman was landed from the brig *During*, which had arrived at Salcombe from St. Lucia. Mr. Langworthy, medical officer to the Board of Trade, saw the man, and suggested that he should be sent to the Kingsbridge Workhouse, whither he was taken in a public conveyance. Messrs. Cornish and Webb, medical officers of the union, having visited the patient, reported that he was suffering from a febrile affection which presented all the symptoms of yellow fever. The other patients in the hospital were, it appears, immediately removed, and the building submitted to a process of disinfection. The man died, and the matter is to be laid before the Board of Trade. It may be mentioned that the captain of the *During* stated that he had a clean bill of health when he left St. Lucia.

DR. GEORGE BLAND, medical officer of health for Macclesfield, in reporting on the mortality of the town in the first quarter of the current year, shows that the death-rate was 23·5 per 1000. This figure, although higher than is consistent with perfect healthiness, is considerably lower than preceding returns in 1876 and 1875. The decrease is attributed to the general mildness of the season and the absence of an epidemic. Under the head of sanitary work the following measures were carried out in the period:—173 nuisances were removed, 110 notices issued for non-compliance with the Board's notice, numerous houses inspected and cleansed, and large quantities of meat and potatoes were destroyed as unfit for human food.

THE mortality in London last week was at the rate of 22 per 1000 annually. There were registered 1490 deaths, including 54 from small-pox, 44 from measles, 16 from scarlet fever, 2 from diphtheria, 43 from whooping-cough, 21 from different forms of fever, 9 from diarrhœa, and 327 referred to diseases of the respiratory organs. On Saturday last the Metropolitan Asylum District Hospitals contained 846 small-pox patients. The number of new cases admitted during the week was 246 (against 161 and 207 in the two preceding weeks), being the largest number of admissions since the commencement of the epidemic.

THE committee appointed to carry out the proposal for a testimonial to Mr. John Simon, C.B., have decided that it shall assume the form of a marble bust of Mr. Simon for presentation to the Royal College of Surgeons. Mr. Simon's eminent services to the State and to the cause of sanitary science are sufficiently well known in the profession and out of it. Subscriptions may be paid to the account of the "Simon Testimonial Fund," at Messrs. Robarts, Lubbock, and Co., 15, Lombard-street, City.

A REPORT on the Sanitary Condition of the Cambridge Improvement Act District in 1876 has been issued by Mr. B. Anningson, medical officer of health. The state of the public health of the district during the year under notice was on the whole satisfactory, and the death-roll less than it has been for some years past. The mortality rate, exclusive of persons not belonging to the district, was 17·44. Scarlet fever was prevalent throughout the year, and although not very fatal, proved troublesome to deal with. A few cases of diphtheria were traceable to bad drainage, and two cases of cholera (?)—one fatal—occurred in the same block of buildings during August.

THE excessively high death-rate of 60 per 1000 annually prevailed in Bombay at the date for which we have the latest returns. On the other hand, in Calcutta, which is perhaps, taken altogether, the most unhealthy of Indian cities, had the comparatively low death-rate of 27 per 1000.

AN exceptionally low death-rate was attained in Shoreham in the last quarter. The medical officer of health for the town, Dr. Kempe, reports that the mortality was only 8 per 1000 per annum. The place had been remarkably free from disease of any kind.

THE sanitary condition of Madras is still terribly bad. The *Times of India* repeats that during the four months ending March 31st last, 15,252 deaths were registered, 3000 of which were due to small-pox and 4000 to cholera.

THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

Session 1877.

THURSDAY, MAY 11TH.

THE Annual Meeting of the General Medical Council was commenced on Thursday last, Dr. Acland, President, in the chair.

Sir James Paget having been introduced as the new representative of the Royal College of Surgeons of England,

The President delivered his address.

On the motion to receive and enter upon the minutes the report of the Executive Committee, stating that they had elected Mr. W. J. C. Miller as registrar, pursuant to the powers conferred on them by the Council, Sir D. Corrigan moved an amendment to the effect that in having appointed a gentleman who is not a member of the profession, they had acted contrary to the spirit of the Medical Act, and had not given satisfaction to the members of the Council or to the profession generally. The amendment, not being seconded, fell to the ground.

After some formal business, Dr. Humphry moved, "That having regard to the good spirit in which the visitations of examinations and the reports of the visitors had been generally received by the licensing bodies, and to the improvements which had been made in all, or nearly all, the examinations for admission to the Register, it is not desirable now to enter into a discussion on the report of the Committee on the Visitations and Examinations, and the answers of the licensing bodies, but to send copies of the report to each of the licensing bodies for consideration." The motion, after discussion, was adopted with some verbal alterations.

The answers obtained from the licensing bodies in regard to the result of professional examinations and the deficiencies in preliminary education, together with a report on the same by Dr. Humphry, and an analysis of annual returns by Dr. Smith, were received; and the Council resolved to take the subject into consideration on Saturday.

Several legal questions were submitted to the Medical Acts Committee, and the Council adjourned.

A more detailed report will be given in our next number.

THE SMALL-POX EPIDEMIC.

THE two principal features of the Registrar-General's last weekly return bearing upon the small-pox epidemic in London were of a somewhat contradictory character. While the deaths from small-pox registered in the metropolis during the week ending the 5th inst. showed a marked decline, and were lower than in any week since the beginning of December last, the number of new cases admitted to the Metropolitan Asylum Hospitals exceeded any previous weekly number since the commencement of the epidemic. During the week the number of new cases in the north of London taxed the resources of the Metropolitan Asylum Hospitals at Homerton and Hampstead. On the other hand the proportional mortality to completed cases continues to decline.

The fatal cases of small-pox in London, which had been 68 and 89 in the preceding weeks, declined to 54, of which 32 occurred in Metropolitan Asylum Hospitals, 2 in the Highgate Small-pox Hospital, and the remaining 20 in private dwellings. After distributing the fatal hospital cases, it appears that 6 of the deceased small-pox patients had resided in Bow and Poplar, 5 in Southwark, 4 in Marylebone, 4 in St. Pancras, and 4 in Hackney. The fatal cases showed a slight increase in West and Central London, whereas they had markedly declined in all other parts of the metropolis.

Correspondence.

"Audi alteram partem."

MEDICAL PROTEST AGAINST THE SALE OF INTOXICATING LIQUORS BY GROCERS.

To the Editor of THE LANCET.

SIR,—I have signed, and herewith return, the protest contained in this week's LANCET.

Permit me to say that I cannot express too strongly my admiration of the wisdom and public spirit manifested in the course which you have taken. THE LANCET, on various occasions, has earned the gratitude of all thoughtful Englishmen, but I venture to assert that in nothing has it ever been so likely to do good service as in the cause which it is now taking. The evil which you are now attacking is so insidious in its growth, so malignant in its effects, so terrible in its consequences, and is so generally incurable when established, that its spread is appalling.

If medical men, who, more than any other class, witness the ravages—the frightful ravages—which alcohol is producing amongst women, are silent, permitting its causes to operate without protest, allowing the enemy to undermine the strongholds of society, without raising an alarm, then they betray their trust, they are untrue to their traditions, they are unfaithful to the principles which have hitherto guided them, and thousands and tens of thousands of miserable men, and still more miserable women and children, may rise up in judgment against them.

Of all the curses which can fall on a community, there is not one which can compare with drunkenness amongst women, because it is the prolific parent of every form of evil which can blight and destroy a people. A woman who is addicted to drink neglects her duties, loses her interest in her children, in her husband, and in herself; her home duties are neglected, and the money which should buy good food, clothes, and home comforts, is spent on drink; she becomes reckless, a curse to herself, and to all who are unfortunately connected with her.

It will be remembered that a drunken woman was held in such abhorrence by the ancient Romans, that women were prohibited from touching wine, and a husband was even held to be justified in killing a drunken wife. Much as we may revolt at the idea of such a barbarous law, it is certain that, to many intemperate women, a violent but sudden death would be enviable, compared with the misery, loathing, and horror which time after time she experiences in consequence of the degrading habit she has acquired.

A wise people act on the principle that prevention is better than punishment, or even cure. To take every reasonable means of protecting women from the temptation of drinking is a national duty. Woman needs greater protection than man; her soft, yielding, emotional nature, on the one hand, and the monotonous routine and other depressing conditions of her daily life, on the other, give to the exhilaration which alcohol produces, a degree of enjoyment which in many cases amounts to fascination; the craving for renewal is irresistible.

Medical men have exerted themselves most disinterestedly in urging on the community extensive structural changes, inside and outside of the dwellings of the people, in order to remove, or at least diminish, the agencies producing disease. In doing this, they have entailed on the owners of property heavy burthens, and they have subjected private individuals to considerable inconvenience and loss; but it has been a recognised principle that private interests must yield to the general good. To be consistent, medical men must now be prepared to discharge their obligations by protesting most earnestly and determinedly against the system of selling liquors by grocers. Women must be defended against the temptations which beset them so powerfully and so numerously. Formerly the grocer was the greatest protection against intemperance. The tea and coffee which he chiefly dealt in were stimulants which refreshed without exhilarating, preventing the weary and depressed from having recourse to alcoholics. Moreover, women formerly were in little danger of acquiring a love of alcoholic stimulants; no decent woman would be seen going into a public-house if she could help it. However much a woman had desired to purchase liquor, unless she had become lost to shame, she shrunk from the possibility of being seen entering the liquor shop. Now there is no such safeguard; a woman can scarce go into a place where groceries are sold without being actively or passively tempted to purchase liquor. Wine is the most profitable article the grocer deals in, hence he is most anxious to induce his customers to become purchasers. Moreover, when a liking for liquor is once established, the demand for liquor is a growing one; that branch of trade developes faster than any other. Hence the disposition of the trader to connive at deception on the part of the female, entering as soap, or tea, or "goods," items which really mean liquor.

I am positively appalled by the evidences which I meet with in the course of practice of the growth of intemperance amongst women, owing to the sale of liquors by grocers. These cases are often painful in the extreme. I was therefore delighted when I read a few weeks ago the article which appeared in your pages on the subject. I was still more so, when I saw in your present week's issue that you had taken the resolution to fairly grapple it, and I trust that the appeal which you have made to the members of our noble profession will be promptly and universally responded to.

Yours truly,

Manchester, May 9th, 1877. ROBT. MARTIN, M.D.

To the Editor of THE LANCET.

SIR,—At a meeting of the Committee of the Tea Dealers and Grocers Association, held to-day, it was resolved that a letter should be addressed to you, expressing regret at your leading article against the sale of wines and spirits by grocers.

The Committee desire me to point out to you a fact that appears to have escaped your notice: That in the recently published Report of the Select Committee of the House of Lords on Intemperance, there is not a single instance of reliable evidence that the sale of wines and spirits by grocers has induced intemperance; but, on the contrary, that this mode of trading is calculated to induce temperance, by the supply of stimulants used under home influence, where the consumer is protected from taking more than he ought, and spending more than he can afford, in preference to bar-drinking, where the reverse of similar restrictions prevails.

The Committee also desire me to point out that the trade of the grocer is as openly conducted as any in the United Kingdom.

I am, Sir, yours faithfully,

FRED. MORRISON,

The National Chamber of Trade, 418, West Strand, Secretary.
May 9th, 1877.

THE DEATH FROM CHLORAL.

To the Editor of THE LANCET.

SIR,—I shall feel obliged if you will allow me to make a few remarks on the unfortunate occurrence that recently took place in my establishment at Balham, but before doing so I must point out the errors of the reporters which have been circulating in the daily papers:—

1st. Neither I nor any of the witnesses at the inquest made use of the term "dipsomaniac," the reporters having substituted it for the word I actually used, which was "intemperate."

2nd. I said, "lately senior surgeon, and now consulting surgeon to the Westminster Hospital," and not senior consulting surgeon.

3rd. I never, as reported, prescribe a given quantity of chloral every night, but only such a dose as the condition of the patient seems to require.

4th. I did not say 80 grains might be given with impunity at one time, and at another 20 might prove fatal; but I did say something equivalent to this, substituting 60 and 30 grains for 80 and 20 grains.

5th. It did not transpire, as stated by *The Times*, that a larger dose had been given on the fatal morning than on any previous occasion.

Lastly. I was not in the habit of giving the chloral in five ounces of water, as reported, but in three, and the last time it was made up was the only occasion in which five ounces were given.

The statement of the attendant that the deceased had said, how very careless I was, must have had reference either to the quantity or quality of the mixture; as regards the former, I am in the habit of giving from 20 to 60 minims of the solution of chloral, which contains one grain of the salt to one minim of water, as prepared by the General Apothecaries' Company, in an ounce and a half of water, and, therefore, in the two doses I put three ounces; but the nurse, who made up that which the patient so much complained of, had put five ounces of water instead of three. As regards quality, his remark might have had reference to the varying strength of the draught. On one occasion I reduced the dose of chloral to 35 grains, but the patient passed a wretched night, and I was obliged to raise it again till 50 grains seemed to be the minimum quantity required to produce the desired effect. This may seem, and no doubt is, a large and possibly might be a poisonous dose to a temperate man, as half an ounce of opium would be; but to a regular chloral taker, or opium eater we know it is not so. My rule is to give the least quantity that will procure sleep, and if that does not ensue within two hours, I give another dose or half dose, according to circumstances. In the case of a confirmed brandy drinker and morphia taker, I prescribed 60 grains of chloral, and it was not till three such doses had been taken, or 180 grains, that sleep followed. In another case, one of delirium tremens, where the gentleman had had no sleep for three nights and was worn out, 20 grains quickly produced the desired result, and he slept quietly for twelve hours continuously, then awoke to relieve himself and take nourishment, and again fell asleep for nine hours, when he awoke well.

I have found that as the alcohol is got rid of out of the system, so the quantity of chloral required to procure sleep is less, and in the majority of cases that have come under my treatment it has been dispensed with altogether within a week of the patient's admission. The injurious practice of giving alcohol in these cases, with the view of letting them down gently, as it is called, and its retardative effect on recovery, could not have been better illustrated than in this case, which was not worse, or even so bad as some I have had under my care; but my treatment was counteracted from the first by the importunities and threats of the patient, and by the too-yielding nature of my attendants. In cases of this description the greatest kindness is severity.

The history of the case is briefly as follows:—Mr. L—— had been given to intemperance since eighteen years of age, and latterly had been also a regular chloral drinker. He told me his usual dose was 40 grains, with 20 grains of bromide of potash; but how often he took this he did not say. My object and intention were to cut off both the alcohol and chloral, the former at once, the latter by degrees, as sleep was absolutely necessary. I found out that, moved by his entreaties and assurances that as he was a medical man himself he knew what was best for him, and as a lesser evil than his going out to procure drink, my attendants, against my orders, gave him from time to time small quantities of whisky. The chloral, of which I never ordered a stated dose to any one, had on all but two occasions previously been given by myself, the largest dose the patient had taken having been 60 grains, which was on the night of his admission. On the night in which it proved fatal I had not prescribed any, having expostulated strongly with him on the subject the day before, and told him it must be absolutely cut off. I had not, however, forbidden my attendants to give it, because on no previous occasion had it been given without my direct sanction; but they, relying on precedent and with disastrous faith in the patient's own medical knowledge, administered that last dose, which from subsequent analysis has been found to contain less than 50 grains. My invariable order to the attendant is to allow two hours to elapse before a second dose is given; but from investigations made subsequent to the inquest it would appear that the first dose could not have been taken before half-past 11, so that the portion of the second which was used must have been taken about an hour after it, death having ensued some time before 1 o'clock. Notwithstanding the mistaken kindness of my attendants in giving the deceased a little alcohol indoors to prevent his going out and getting much, he nevertheless did go out and procured both drink and chloral. It is greatly to be regretted that there is no legal power to prevent these cases of self-destruction. Could such power have been exercised, this fine man, who was beloved by all and who possessed both physical and mental gifts which are the portion of few, might have been enabled to overcome this enemy and been an ornament to his profession and society.

Your obedient servant,

Balham-hill House, May 8th, 1877. CARSTEN HOLTHOUSE.

DENTAL REFORM.

To the Editor of THE LANCET.

SIR,—Mr. Cartwright has spoken for me on several occasions, and Mr. Coleman has condemned my deeds in your last issue. In return I ask you to allow me to speak for myself. Mr. Cartwright complains that your printer, by a press error in the use of inverted commas, placed wrongly to my account a resolution with the wording of which he did not wish to charge me. Printers seem to be a very sorry set of blunderers; for the printer of the British Medical Association *Journal* has, with singular exactness, committed the same error in the use of commas. Mr. Cartwright evidently fails to see the difference between a law which would interfere with existing practitioners and one which would restrict its operation to those persons who have yet to enter upon their professional studies: for in his letter dated May 2nd he persists in regarding Resolution 5, quoted (not quite correctly) at the end of Mr. Coleman's letter, as an attack upon existing practitioners. I think Mr. Cartwright would understand the difference between a law which proposed to deprive him of a life-lease, and one which declined to renew the lease to an unborn successor without alteration of terms, and this is all the Dental Reform Association proposes shall be done in respect to professional titles and registration.

Mr. Coleman attaches great importance to what he calls the legal rights of the Medical Corporation in the use of the designation surgeon-dentist, &c. He may be justly challenged to produce a proof of such rights. I do not think he will find the mention of any special branch of surgery in the charters of incorporation, excepting in those granted recently to the College of Surgeons, of which the Dental charter is the latest, and bears the date 1859. But the case of Mr. Gould proved conclusively that the Medical Corporations represented by the Medical Council have no legal authority or right in the use of the title of surgeon-dentist, &c. Any person not legally qualified may be fined for styling himself a surgeon; but no person can be punished for assuming the title of surgeon-dentist. If the right by usage be claimed, then it may be shown that the vast majority (ten to one) of

those who have used the title are not members of any medical corporation.

But dental surgery, as is now known, is, in fact, a new science—a new branch of the healing art,—developed within the present century, mostly within the last half-century, and most rapidly within the last five-and-twenty years, and it could not be rightly dealt with by laws enacted before it came into existence. The acknowledged legislative want was met in the Dental charter granted to the College of Surgeons, and what is now needed to perfect the powers is the addition of a suitable registration. The cry of "vested interests" may be raised against any change of law however needful, or, as in the present case, against the introduction of law in the place of lawlessness, against the substitution of rule for disorder.

The question of expediency and liberality stands below justice. If special training makes the best practitioner, the advantage should be secured for the use of the public, for whose assistance dentists exist; and it does not exceed the purposes of justice that the trained should be distinguished by title from the untrained special practitioner.

But these contentions respecting title and registration are rather beside the mark, and serve only to mask the much more important question of special education. Special training is either a necessity for the dental surgeon or it is a troublesome superfluity. The Association of Qualified Surgeons practising Dental Surgery wholly ignores the dental qualification by excluding from its membership those practitioners who possess the dental licentiateship only; and in a set of resolutions lately forwarded to the College of Surgeons, say indirectly, but still very plainly, that the special education is quite needless. This Association urges that the possession of the licentiateship shall not of itself qualify a person to teach in a dental school, or to hold a hospital appointment, but that the possession of a registerable surgical qualification shall in itself fully qualify the holder for either office. Now, if the special education, of which the licentiateship is but the authentic testimony, is needless for the teacher of dental surgery or for a hospital dentist, how, in the name of common sense, can it be urged that a special training is necessary for the practitioner. In other words, the Association denies, by its rules and resolutions, the necessity of special education; and indirectly asserts that the dental curriculum and licentiateship are but troublesome superfluities.

Mr. Cartwright and Mr. Coleman have for many years been teachers in the London School of Dental Surgery. They have received the fees of students and rendered themselves responsible for the special education of their pupils, and their change of opinion has been sudden and unexpected. The one is the president, the other the treasurer, of this hostile Association. It is difficult to estimate the numerical strength of the party of which they are leaders, for, although the resolution sent to the College was backed by thirty-eight dental practitioners, the signatures were in many cases appended without consulting the owners, and it is known that many whose names were used are strong supporters of special education. To the counter memorial in favour of the licentiateship the names of 259 qualified dental practitioners were appended with their individual assent.

A consideration of the foregoing facts will afford a sufficient explanation of the opposition given to the proceedings of the Dental Reform Association by Mr. Cartwright and Mr. Coleman. They may reasonably object to the registration of a qualification to the existence of which they are opposed, and on this ground only can it be contended without insult to the client that the surgeon without special training would desire to assume the title of surgeon-dentist.

If a perfectly fitting education, obtained at the hands of the College of Surgeons, tends to a separation of dental from general surgery, the fears of another correspondent may be realised; but it would not be difficult to prove that the tendency is altogether in the opposite direction. Identity is not a necessity of affiliation or of equality. But come what may, dental surgery must be specially taught and practised, and if the teaching fail here, the practice should, in common honesty, be abandoned in favour of those who are taught elsewhere.

The public has a right to exact competence in dental practitioners, and skilfulness can be gained only by early training under skilful teachers. The principles of music may be learned at any age; but to become a skilful performer the student must, in his youth, patiently practise under efficient teachers; and so it is with dental surgery.

The skilful in all occupations, great and small, have a solid pleasure in the exercise of their powers, and are justly proud of their calling. True dignity is consistent only with truthfulness in its highest sense, and amongst professional men he only is truthful who is master of his professed subject. Dental surgery is a public necessity and honourable to its representatives if honourably followed. There may be shame somewhere; but certainly not in the name of dentist, or in the subject of dental surgery.

Yours faithfully,

Caterham Valley, May 8, 1877. JOHN TOMES.

To the Editor of THE LANCET.

SIR,—I shall feel obliged if you will insert the enclosed copy of a letter sent to the Secretary of the Dental Reform Committee.

Your very truly,

Bath, May 7th, 1877. CHARLES GAINE.

[Copy.]

8, Edgar-buildings, Bath, May 7th, 1877.

DEAR SIR,—I have just read in THE LANCET some of the absurd clauses proposed by the Dental Reform Committee, and as I (as a member of that body) have been no party to the framing of such a code, must request you will be good enough to remove my name from the list of members.

I am, dear Sir, yours faithfully,

J. S. Turner, Esq. CHARLES GAINE.

UNUNITED TENDO ACHILLIS.

To the Editor of THE LANCET.

SIR,—In your number of last Saturday you were good enough to insert the note of a case of Ununited Tendo Achillis treated successfully by me.

Since that note was written my attention has been directed to a case in which Dr. Little[1] performed a subcutaneous operation with an excellent result, after non-union of the same tendon. In Dr. Little's case the non-union was the result of a *subcutaneous* division of the tendon, and therefore it differed somewhat in its nature from mine. Whether or not Dr. Little's operation will prove successful in a case of division of the tendon by external wound has still to be proved; but should I meet with another case such as I reported in your last number, I will certainly try this proceeding in the first instance, as it is more simple in every way than the one I myself adopted.

I remain, Sir, yours faithfully,

Charlotte-square, Edinburgh. THOMAS ANNANDALE.

TRANSFUSION.

To the Editor of THE LANCET.

SIR,—Dr. Roussel's letter in your number, May 5th, renders it necessary for me to state that I have not yet altered my transfusion apparatus, and that I have no intention of adopting and affixing to my instrument the parts of his transfuser which he claims to have invented.

I am, Sir, &c.,

Upper Wimpole-street, W., May 8th, 1877. J. H. AVELING, M.D.

MANCHESTER.

(*From our own Correspondent.*)

THE Infirmary war still continues to rage, one party endeavouring to make the expenditure appear excessive, the other striving to show that the present management and economy are convertible terms. To this end statistics, as usual, are made to play their chameleon part. At a meeting of the weekly board on Monday, April 30th, Mr. Hulse stated that the average expenditure for the past three years was £21,419 5s. 9d.; the number of beds for the same period

[1] On the Deformities of the Human Frame, p. 166.

433·66. Mr. Goldschmidt questioned the accuracy of Mr. Hulse's statement, and held that, in order to reduce the cost per bed, Mr. Hulse had shifted the extravagance to the out-door department. Mr. Goldschmidt further made comparisons on this head between the Manchester Infirmary and the Liverpool and Charing-cross Hospitals. Complaints of want of room having been made, the Medical Board suggested that additional accommodation should at once be provided for twenty more male medical cases; after some discussion a resolution, embodying the recommendation of the Medical Board, was passed.

Manchester, May 8th, 1877.

GLASGOW.

(From our own Correspondent.)

THE Factory and Workshops Bill, lately introduced by the Home Secretary, has, in its surgical and pecuniary aspect, been regarded with apprehension by those most interested. The result, however, of a recent deputation to London has been, I understand, reassuring to the retention of present appointments and the notoriety of sixpenny fees.

The medical session in the Extra-mural Schools has been opened with disappointment, for though the lecturers are many the listeners are few. It has been suggested that, as in social life, the line must be drawn somewhere with regard to ineligibles, so the lecturing space which has involved Glasgow might be curtailed, if the demarcation boundary was fixed between success and non-success at the minimum number of half-a-dozen students, after which all privileges would be withheld. The experiment would be painful, but in the end kind, even to those who might consider themselves most injured.

The literary students connected with the University have, during the past session, achieved notoriety by processions, which, in some instances, ended at the police-court; but a sober, quiet, goody goody air has marked the demeanour of the young aspirants in our profession. To some extent, this can be accounted for by interesting conversaziones, specially adapted for their benefit, given to them by their professors, aided by sweet music and gentle melodies. Who, after these, would dream of looking fiercely at a policeman or joining a disorderly crowd!

Paisley has been visited with an epidemic of sore-throat, and Gartnavel with a typhoid fever case, with marked hydrophobic symptoms during life, but swelling of Peyer's patches observed after death. These events, which formed the subjects of debate at the concluding meeting of the session of the Medico-Chirurgical Society, will doubtless be faithfully recorded in the *Glasgow Medical Journal*, when that periodical again favours its subscribers with another issue.

Glasgow, 8th May, 1877.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

Friday, May 4th.

ARMY SURGEONS.

Mr. MITCHELL HENRY asked the Secretary of State for War whether he would state why the commissions of the gentlemen who were gazetted as surgeons under the Royal Warrant of April 28th, 1876, were not antedated as was heretofore the case; and, in the event of their not being antedated, would the time spent at the Army Medical School, Netley, count towards promotion for those who might be continued in the Department after ten years.

Mr. HARDY said that previous to the year 1876 the time of instruction at Netley was allowed to count as a period of service. When, however, the ten years' system of short service was adopted, it appeared undesirable to cut off the period during which they were under instruction. It was not desirable to make a distinction between those who left at the end of ten years and those who did not.

THE Glasgow University has conferred the degree of Doctor of Laws on Dr. Andrews, vice-president of Queen's College, Belfast, and president of the British Association for Science.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Fellows of the College on the 7th inst.:—

Baxter, Evan Buchanan, M.D. Lond., Weymouth-street.
Farquharson, Robert, M.D. Edin., Brook-street.
Ferrier, David, M.D. Edin., Upper Berkeley-street.
Little, William John, M.D. Berlin, Park-street.
Moore, Norman, M.D. Camb., St. Bartholomew's Hospital.
Parsey, William Henry, M.D. Lond., Hatton, Warwick.
Poore, George Vivian, M.D. Lond., Wimpole-street.
Prance, Charles Rooke, M.D. Edin., Plymouth.
Roberts, Frederick Thomas, M.D. Lond., Harley-street.

On the same day the following gentlemen were admitted Members of the College:—

Abercrombie, John, M.B. Camb., St. Bartholomew's Hosp.
Barnes, R. Sydenham Fancourt, M.B. Aberd., Weymouth-st.
Beach, Fletcher, M.B. Lond., Clapton Asylum.
Buck, William Elgar, M.D. Camb., Leicester.
Fonmartin, Henry De, M.D. Paris, Kennington-road.
Harris, Vincent Dormer, M.D. Lond., St. Bartholomew's Hosp.
Humphreys, H., M.D. Camb., Eccles Old-road, Manchester.
Lacy, Chas. Sethward De Lacy, M.B. Oxford, Ovington-sq.
Murrell, William, Albany-street.
Ormerod, J. Arderne, M.B. Oxford, St. Bartholomew's Hosp.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At a meeting of the Council on the 3rd inst. the following Member was elected a Fellow of the College:—

Walker, Hugh Eccles, M.D. St. And., Chesterfield, Derbyshire.

The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Board of Examiners on the 3rd, 4th, 7th, and 8th inst.:—

James T. Mitchell, Arthur A. Warburton, William Banks, Jas. M'Culloch, William H. Neale, Frederick W. Mott, Henry F. Haun, A. J. M'C. Routh, Alfred E. Wigg, T. Hoskin, Arthur J. Harries, Ernest W. W. Farmer, Mark F. Sayer, and Frederick W. H. D. Harris, University College; John W. Gill, Ponsonby Garrard, William E. Veale, Edwin S. Tait, Walter D. Thomas, Walter Wickham, Ernest W. Shepard, Henry G. S. Warren, Herbert Lillies, William W. Shaw, Henry Smith, Walter A. Hume, Alfred C. Preston, Henry T. Groom, Joseph Faulkner, and A. P. Adams, St. Bartholomew's Hospital; William F. Thomas, Madras and University College; P. St. George Williams, Percy M. Wood, Wm. P. Morgan, William Whitworth, Geo. C. S. Perkins, B. N. Rake, Herbert A. Clowes, John S. Crook, and James T. Brett, Guy's Hospital; George S. Robinson, Edmund Vaudrey, Charles R. Bartlett, Henry W. Hubbard, and William S. Webb, St. George's Hospital; A. C. Bridges, James E. Lane, Robt. H. Lovell, and C. M. H. Jones, St. Mary's Hospital; Alfred C. Wey, J. W. L. Ware, and Joseph H. Martin, Middlesex Hospital; John Jones and Walter A. S. Bridgeford, Charing-cross Hospital; Frank Shapley, Edwin H. Fenwick, and George B. Waterhouse, London Hospital; Arthur Lofthouse and William H. Hallam, King's College; Thomas M. Andrews, St. Thomas's Hospital.

Of the 169 candidates examined during the last and present week, 66 failed to satisfy the Board, and were referred for three months' further anatomical and physiological study.

[In the list of Members published last week, the name "Wright, Alexander W., Trinidad," should have been—Wight, Alexander W.]

Mr. Le Gros Clark, F.R.S., late President of the College, has been re-elected a member of the Board of Examiners in Dental Surgery.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on the 3rd inst.:—

Brown, William Perrin, Warrington.
Ground, Edward, Whittlesea.
Haines, William John, Hendon.
Langton, Herbert, Brighton.
Mercier, Charles Arthur, Hackney.
Reader, Jeremiah, Bridport.
Thomas, John Raglan, Llanelly.
Wood John, Wolverhampton.

The following gentleman was among those who passed the recent Preliminary Examination in Arts, second class:—

Griffiths, A. P. H.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At examinations recently held the following obtained the diploma in Surgery:—

Francis Boyne Burton, Robt. W. Colles, Patrick Oswald Considine, Hubert Kelly Costello, William Crozier, Ebenezer Donaldson, Richard Thomas Dundas, James J. Edge, Francis C. Fisher, Cornelius Fitzgerald, Denis Hogan, John Freeman Knott, Stephen William Mackey, Robert Joseph Martyn, Laurence Pereira Marques, James G. M'Neece, William Kildare Miley, William Henry O'Meara, Edward Daniel O'Neill, John Patterson, James Chas. Peacock, William Repton Spourt, Reuben Turner, Richard G. Tyner, John J. Walsh.

A VERY handsome timepiece has been presented to Mr. J. Hornsey Casson on the occasion of his leaving Ashburne. It bears the following inscription:—"Presented to J. H. Casson, Esq., by a few of the working class, for his services to the poor of Ashburne."

THE will of Dr Lawson Cape, of Curzon-street, who died on the 22nd March, has been proved under £70,000.

AT Aberdeen a public meeting has been held, the Lord Provost in the chair, and very influentially supported, at which it was resolved "That a Hospital for Sick Children be established in Aberdeen, for the benefit of the poorer inhabitants of the city and of the counties of Aberdeen and Kincardine and counties adjacent." All the required cots were subscribed for, and £522 in donations and annual subscriptions, and several others promised.

PATHOLOGICAL SOCIETY OF DUBLIN.—At the last meeting of this Society for the present season the gold medal was presented to Mr. Knott, one of the students attending the meetings, for his essay on the "Pathology of the Œsophagus." Some important changes in the constitution of the Society were at the same meeting agreed upon—first, that students should for the future be excluded; secondly, that discussion should be permitted on each specimen exhibited.

BEQUESTS &c. TO MEDICAL CHARITIES.—Mrs. Roe, late of Nutley, Co. Dublin, has bequeathed £21,700 to various hospitals and other charitable institutions. Mr. William Holland, of Deptford-bridge, bequeathed £1000 to the Royal Kent Dispensary, Greenwich. Mr. Richd. Nation, of Orchard-street, Portman-square, bequeathed £500 each to St. Mary's Hospital at Paddington, the Royal Free Hospital, the Orthopædic Hospital, and the Samaritan Free Hospital for Women and Children. Messrs. Watney and Co., Stag Brewery, have given £200 to the Repairs and Improvement Fund of the Westminster Hospital. Miss A. Porter, of Birlingham, bequeathed £200 to the Worcester Dispensary and Provident Medical Institution.

STEWART INSTITUTION FOR IMBECILE CHILDREN, LUCAN.—During the past year the subscriptions and donations amounted to £3129 6s. 6d., showing an increase over that of 1875. The chairman at the annual meeting recently held referred to the satisfactory condition of the institution, and the gratifying results attained in the education of the children, some of whom had been fitted to discharge all the ordinary duties of the cabin and the cottage, while others were able, under a slight supervision, to assist the funds of the institution by their daily labour. Dr. Kidd stated that there were a number of children seeking admission, but at present there was neither the room to receive them nor the money to support them. In the new building at Palmerstown there would be accommodation for 200 children, but it was highly necessary that an increase should be made in the subscriptions.

Medical Appointments.

BRADEN, J. G., M.R.C.S.E. & L.M., L.S.A.L., has been appointed Medical Officer to the Lewes Provident Society for the ensuing year.

CADDY, H., M.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the North Dispensary, Liverpool.

CAMERON, Dr. N., has been appointed Senior House-Surgeon to the General Infirmary, Macclesfield, vice Roughton, resigned.

CLAPP, R., L.R.C.P., M.R.C.S.E., has been appointed Junior House-Surgeon to the Royal Albert Edward Infirmary, Wigan.

DORAN, A. H. G., F.R.C.S., L.S.A., has been appointed Surgeon to the Out-department, Samaritan Free Hospital, Lower Seymour-street.

FARDON, Mr. E. A., has been appointed Resident Physician's Assistant to the Middlesex Hospital, vice Wood, whose appointment has expired.

GIBSON, G. A., D.Sc. &c., has been appointed one of the Resident Physicians to the Royal Infirmary, Edinburgh.

HASSALL, J., M.B., C.M., M.R.C.S.E., has been appointed House-Surgeon to the Clayton Hospital and Wakefield General Dispensary, vice Hick, resigned.

HOOKHAM, P., M.R.C.S.E., has been appointed Junior Resident Medical Officer to the Royal Free Hospital, vice Pickup, resigned.

HUMPHRY, R., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 1 District of the Petworth Union, vice Boxall, deceased.

KELLY, R. V., L.R.C.P.Ed., has been appointed Medical Officer and Public Vaccinator for the Castle Bromwich District of the Aston Union, vice Oates, resigned.

MCCANN, C., M.R.C.S.E., L.S.A.L., has been appointed principal Medical Officer to the Central London Sick Asylum District Asylum, Highgate, vice Dowse, resigned.

MACMUNN, J., L.R.C.S.I., L.K.Q.C.P.I. & L.M., has been appointed Assistant to the Resident Medical Superintendent of the Sligo District Lunatic Asylum.

MAINE, W., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the newly-formed No. 6A District of the Tendring Union, Essex.

MEARNS, J. H., M.B., C.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Maker District of the Reeth Union, and Medical Officer of Health for the Maker Sub-district of the Reeth Rural Sanitary District, vice Towle, resigned.

MEREDITH, W. A., M.B., C.M., M.R.C.S.E., has been appointed Surgeon to the Out-department, Samaritan Free Hospital for Women and Children, vice Thornton, resigned.

PODSON, W., F.R.C.S. & L.R.C.P.Ed., has been reappointed Medical Officer of Health for the Leeds Rural District.

PRICE, B., L.R.C.P.Ed., has been appointed a Medical Officer to the East Dispensary, Liverpool.

RICHARDS, T. W., M.B., C.M., M.R.C.S.E., has been appointed House-Surgeon to the County and County of the Borough of Carmarthen Infirmary, vice Hughes, resigned.

SIMPSON, R. P., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Weymouth Port Sanitary District for the ensuing year.

THEW, E. P., M.B., C.M., has been appointed one of the Resident Physicians to the Royal Infirmary, Edinburgh.

TEEWMAN, G. T., L.S.A., has been appointed House-Surgeon to the Victoria Hospital for Sick Children, Queen's-road, Chelsea, vice Walford, resigned.

WEATHERLY, L. A., M.B., C.M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 6 District of the Bedminster Union, vice F. Weatherly, M.R.C.S.E., L.S.A.L., resigned.

Births, Marriages, and Deaths.

BIRTHS.

GÜNTHER.—On the 4th inst., at Hampton Wick, the wife of Theodore Günther, M.D., of a son.

HEAD.—On the 3rd inst., at East Grinstead, the wife of Robert T. Head, L.R.C.P.L., of a son.

JONES.—On the 1st inst., the wife of Edwin Shelton Jones, L.R.C.P.Ed., of Pwllheli, of a son.

MACLAREN.—At the Stirling District Asylum, Larbert, N.B., the wife of James Maclaren, L.R.C.S.E., Medical Superintendent, of a daughter.

MAURICE.—On the 3rd inst., at Mariborough, the wife of James Blake Maurice, M.D., of a son.

STEVENSON.—On the 2nd inst., at Irondale House, Muirkirk, the wife of Robert Stevenson, L.R.C.P.Ed., of a daughter.

MARRIAGES.

BAINES—PITCHER.—On the 8th inst., at Holy Trinity Church, Eltham, Kent, by the Rev. T. Norman Roussell, M.A., Albert Henry Baines, L.R.C.P., M.R.C.S., of Eltham, third son of the late John Baines, Esq., of Leicester, to Isabelle Emily, third daughter of the late John Henry Pitcher, Esq., of Doctors' Commons.

SWEETMAN—COLLINS.—On Feb. 22nd, at Christ Church, Geelong, Australia, by the Rev. Canon Goodman, William Francis Sweetman, M.D., late Royal Navy, fourth son of Stephen Sweetman, M.R.C.S.E., of Air-hill, Schull, co. Cork, Ireland, to Ida Beatrice, eldest daughter of W. H. Collins, Esq., and niece of the late Colonel Collins, first Governor of Tasmania.

DEATHS.

BISHOP.—On the 1st inst., of general paralysis, Edwin Bishop, M.D., of Calworth Hall, Northamptonshire.

CHINERY.—On the 7th inst., at Lymington, Hants, Charles Warner Chinery, L.R.C.P.Ed. & M.R.C.S.E., youngest son of the late Edward Chinery, M.D., aged 28.

DOUGALL.—On the 4th inst., at Greenock, Andrew Dougall, L.F.P.S.G., aged 41.

FOWLER.—On the 8th ult., at Oakbank, Island of St. Helena, Charles Henry Fowler, M.D., Colonial Surgeon, aged 45.

FOY.—On the 4th inst., at Taunton, Henry Gully Foy, M.R.C.S.E., aged 62.

SANDERS.—On the 3rd inst., at Milton-next-Sittingbourne, William Sanders, M.D., aged 60.

TELFAIR.—On the 6th inst., found dead in bed, Cortes David Telfair, M.R.C.S.E., of Durham, aged 57.

TYSON.—On the 27th ult., at Folkestone, William Taylor Tyson, M.R.C.S.E., aged 65.

WILL.—On the 5th inst., at Ashallow, Cruden, Aberdeenshire, George Will, M.R.C.S.E.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

H. A. Husband: The Student's Handbook of Forensic Medicine.
Dr. Ziemssen: Cyclopædia of the Practice of Medicine.
The Analyst. Vol. I. 1877.
University of London Calendar for 1877.
The Practitioner. May.
W. B. Carpenter: Mesmerism, Spiritualism, &c.
Indian Medical Gazette. April.
Transactions of the Odontological Society of Great Britain. Vol. IX. No. VI.
G. Allen: Physiological Æsthetics.
Rev. A. M. Wilson: The Wines of the Bible.
Dr. R. Farquharson: A Guide to Therapeutics.
Transactions of the Cremation Society of England. No. I.
Oxford Reference Bible.
British Journal of Dental Science. May.
How to Live Well and Save 20 per cent. on a Moderate Income.
Dr. Jones on Explorations of the Aboriginal Remains of Tennessee.
J. D. Everett: Elementary Textbook of Physics.
W. H. Morris: Greek Lessons. Part II.

SECRET DRINKING.

THE undersigned members of the medical profession have signed the protest against the "Grocers' Licence" up to this date. The form appeared in our issue of the 5th inst.

We shall be happy to receive other signatures before the 18th inst., when the returns will be submitted to the Select Committee of the House of Lords, now investigating the causes of intemperance.

Mr. J. Abell, Gloucester; Dr. Adams, Boston; Mr. H. Arnold, Northampton; Dr. W. Alsbone, London; Mr. S. Atherton, Prescott; Dr. J. B. Ball, Brixton; Mr. P. Brady, Kells; Mr. H. Bennett, Breconshire; Mr. H. Butterfield, Yorkshire; Dr. J. Burn, Edinburgh; Dr. F. K. G. Buxholm, Barnsbury; Mr. T. Beatty, Mr. T. C. Beatty, jun., Sunderland; Mr. M. Beck, Dr. G. V. Poore, London; Mr. P. Belcher, Mr. C. S. Kilner, Burton-on-Trent; Mr. S. Bennett, Penzance; Mr. Wm. Bennett, Chester-le-street; Mr. E. U. Berry, London; Mr. Wm. Berry, Wigan; Dr. Wm. Bird, York; Mr. G. P. Blackett, Newcastle-upon-Tyne; Mr. W. H. Blake, London; Mr. T. Blease, Mr. T. T. Blease, Altrincham; Mr. T. L. Booth, Barrow-in-Furness; Dr. W. H. Bucknell, Newcastle-upon-Tyne; Mr. W. H. Butler, Woolwich; Dr. A. Carpenter, Croydon; Mr. A. Carter, London; Mr. S. Cartwright; Mr. H. S. Cartwright; Mr. J. Cash, Mr. J. M. Wheeler, Bath; Mr. W. S. Chadwick; Mr. W. H. Beverle; Mr. H. H. Clyma; Mr. C. P. R. Chubbe, Hull; Mr. Churchill, Chesham; Dr. V. C. Clarke, Pentonville; Mr. A. C. Clifton, Mr. A. G. Wilkinson, Northampton; Mr. Cassidy, Dr. R. Collum, Mr. H. Cripps, Mr. Richard Cresswell, London; Dr. W. H. Carruthers, Mr. W. Carruthers, Runcorn; Mr. E. Chandler, London; Mr. J. Churchill, Mr. C. A. Parker, Gosforth; Nr. R. Colgate, Mr. P. T. Head, Eastbourne; Mr. A. Churchward, London; Mr. J. Collyer, Mr. H. T. Heath, Enfield; Mr. R. T. Collyns, London; Mr. T. Cooke, Ashton-under-Lyne; Mr. C. H. Cornish, Dr. G. B. Cornish, Taunton; Mr. T. R. Cotterell, Mr. F. T. Maisey, Charlbury; Mr. C. Davidson, London; Dr. E. Davies, Dr. T. E. Jones, Dr. E. Williams, Mr. T. Dickinson, Mr. H. V. Palin, Wrexham; Mr. N. E. Davies, Sherborne; Dr. D. Duckworth, London; Mr. A. Davison, Dr. R. Anderson, Dudley, Northumberland; Mr. E. De'Ath, Buckingham; Mr. R. Dade, Mr. E. Durant, London; Mr. F. K. Dickson, Mr. Wm. Parker, Mr. J. Holmes, Buxton; Mr. C. B. N. N. Dunn, Crich, Derby; Mr. J. H. Dwyer, Liverpool; Dr. C. Edwards, Cheltenham; Mr. E. P. Edwards, Angiesea; Mr. C. Eade, Guildford; Dr. D. Elias, Southport; Dr. C. H. Fayre, London; Mr. Ferris, Uxbridge; Sir J. Fayrer, London; Dr. A. Ginders, Normanton; Mr. F. A. C. Fletcher, Eastburn, Yorks; Dr. M. A. Fenton, Coventry; Mr. F. Fox; Mr. T. A. Freeman, Canterbury; Mr. H. A. Grime, Blackburn; Dr. S. J. Graydon, Withington, Manchester; Dr. W. S. Greenfield, London; Mr. C. Fenwick; Mr. J. H. Freer, Ragsley; Mr. R. M. L. Fraser, Darlington; Mr. W. H. Folker, Stoke-on-Trent; Dr. C. B. Fox, Chelmsford; Dr. Wm. J. Fyffe, Clifton; Dr. J. H. Galton, Mr. G. A. Hunt, London; Mr. E. Gaylor, Belper; Dr. Mortimer Granville, Mr. Wm. Giles, Dr. R. S. Nightingale, London; Dr. Jas. Grey Glover, London; Mr. F. Granger, Chester; Dr. F. C. Gray, Mr. C. Gray, Newmarket; Mr. Greenwood, Penryn; Dr. F. de Havilland Hall, London; Mr. H. Hardwicke, Sheffield; Mr. B. N. Hyatt, Shepton Mallet; Dr. H. Hardwicke, Sheffield; Mr. T. E. Hall, Mr. C. White, Mr. H. W. Hubbard, London; Mr. J. R. Hamilton, Harwich; Mr. C. Hirst, Leeds; Mr. E. Husband, London; Dr. A. Hamilton, Mr. R. S. Stewart, Mr. A. G. Newman, Windermere; Dr. J. W. Hayward, Mr. A. E. Hawkes, Liverpool; Mr. C. Higgins, Mr. T. Bird, London; Mr. W. N. Heygate, Kibworth, Leicester; Dr. N. J. Haydon, Minchinhampton; Mr. W. H. Harding, Market Drayton; Mr. Hardman, Blackpool; Mr. T. Harvey, Poplar; Mr. W. Hay, Hull; Dr. F. Healy, Dublin; Mr. C. S. Heap, Burnham; Mr. G. H. Higgins, Leeds; Mr. B. Hill, Mr. A. Hogg, London; Dr. R. S. Hudson, Dr. H. Harris, Cornwall; Dr. James Hurley, Alford; Mr. T. Hutchinson, Dr. R. Erskine, Camborne; Mr. R. J. Hutton, London; Mr. Ilderton, Fairfield; Mr. W. Iliffe, Kendal; Mr. J. Jackson, London; Dr. E. Jones, Dolgelly; Mr. B. Jones, Huddersfield; Mr. Ingram; Dr. Jardine, Chatham; Mr. W. Johnstone, Mr. J. G. Vawdrey, Handsworth; Dr. W. W. Jones, London; Mr. A. Kebbell, Flaxton, Yorks; Mr. Kenyon, Billingborough; Dr. E. S. King, Ilfracombe; Mr. Wm. T. King, London; Mr. G. King, Southampton; Dr. W. H. Lambart, Liverpool; Harry Leach, Esq., London; Mr. E. G. Levinge, Bristol; Mr. G. A. Lewis; Dr. L. Lewis; Dr. J. Livy, Bolton; Mr. J. Lynch; Dr. R. Lloyd, Dr. A. T. Longhurst, London; Dr. John Lowe, Lynn; Mr. W. C. Luffman, Bristol; Mr. L. F. Lundy, Feltham; Dr. Macgregor, Penrith; Mr. J. F. M'Gill, Ayr; Dr. R. Martin; Mr. J. F. Matthews, Mr. J. W. Phillips, St. Austell; Dr. Meton; Mr. S. Musgrove, Lisburn; Mr. D. M'Vingh, Coventry; Mr. A. C. Munro, Mr. A. P. Russell, Dumfries; Mr. H. J. Manning, Salisbury; Mr. Monck, Hucknall-Torkard; Mr. J. C. Maynard, Bishop Auckland; Mr. J. Mathie, Glasgow; Mr. J. M'Carogher, Mr. M'Williams, Halifax; Dr. E. M'Keller, London; Dr. Macrae, Leyton; Dr. Medlicott, Wells; Dr. Muller, Edinburgh; Mr. W. Mole, Mr. C. J. Moore, London; Dr. Morgan, Carnarvon; Dr. E. Morris, Spalding; Dr. R. Neale, London; Dr. T. Newham, Winslow; Dr. J. Nicholls, Chelmsford; Mr. E. Nolleth, London; Mr. A. P. Owen, Derby; Dr. C. A. Owens, Long Stratton, Norfolk; Sareon Major Oughton, Pembroke Dock; Dr. C. E. Oldman, Spalding; Mr. G. Paddon, Mr. Pearse, London; Mr. E. B. Pellen, Carlisle; Mr. T. Philbrick, Hove, Brighton; Dr. J. F. Plomley, Maidstone; Mr. G. Pound, Winchfield; Mr. T. M. Parrott, Sutton Valence; Mr. E. T. Pearce, Holsworthy; Mr. G. F. Poynder, Dover; Mr. A. M. Phelps, London; Mr. E. Pope, Tring; Mr. A. Phillips, Dr. W. D. Stone, London; Dr. G. C. Phipps, Manchester; Mr. Pollard, Mr. J. Powdrell, London; Dr. C. H. Ralfe, London; Mr. Rankin, Airdrie; Mr. H. B. Rackley; Mr. H. H. Rugg, Mr. N. Rugg, London; Dr. Robinson, Midhurst; Mr. Robinson, Chesterfield; Dr. M. K. Robinson, Dover; Dr. D. A. Reid, Tenby; Mr. R. Reynolds, Steeple Bumpstead; Dr. G. P. Rugg, London; Mr. Randle, Mr. G. Miles, Plympton; Dr. J. Roberts, Salisbury; Mr. C. S. Richardson; Dr. Saunders, Plymouth; Mr. Shirley, Leeds; Mr. W. A. Satchell, Groombridge; Dr. Trew, Croydon; Dr. E. J. Shearman, Rotherham; Mr. R. Spencer, Canterbury; Mr. G. Shute, Greenwich; Mr. G. O. Spencer, London; Mr. Sampson, Southampton; Mr. J. N. N. Stidman, Godalming; Mr. F. C. Spouncer, Gainsborough; Dr. H. Salt, Bournemouth; Mr. Stoney, Cumberland; Mr. L. H. Stevenson; Mr. W. H. Sutcliffe, Jersey; Mr. Hugh Smith, Beith; Mr. G. Smith, Ford, Northumberland; Mr. H. C. Selwood, Hursley, Winchester; Mr. James Startin, London; Dr. J. K. Spender, Bath; Mr. J. A. E. Stuart, Musselburgh; Mr. W. B. Sealy, Newark; Mr. Edward Smith, Bolton; Dr. W. Skene, Buckhurst-hill; Mr. S. Stickland, Wish-street, Southsea; Dr. R. Skimming, East Mousley; Dr. J. Southwood, London; Mr. E. Steele, Mr. S. H. Steel, Dr. J. Glendinning, Mr. Thomas Irvine, Mr. J. J. Eyre, Abergavenny; Mr. E. Swales, Sheerness; Mr. J. W. Swan, Bournemouth; Mr. F. H. W. Taylor, Emsworth, Hants; Mr. Hugh Taylor, Mr. E. J. Burgess, Coltishall; Mr. James Thompson, Leamington; Mr. W. P. Teevan, London; Mr. Garnett Tatham, Salford; Mr. J. H. Taylor, Liverpool; Dr. W. Thomson, Peterborough; Mr. J. Tily, Richmond; Dr. J. C. Thorowgood, Dr. J. Randall; Dr. A. Thompson, Ulverston; Mr. G. Tobin, Chorley; Mr. J. Tweedy, London; Mr. Hy. Ubsdell, Buckfastleigh; Mr. W. Vernon, Great Badfield; Dr. James Wakley, Editor of THE LANCET; Mr. Walker, Corwen; Dr. J. Whitson, Glasgow; Mr. R. P. Williams, Dublin; Mr. E. M. Williams, Canterbury; Mr. Geo. D. Widdas, Thirsk, Mr. Thos. Wiltshire, Sheffield; Mr. Charles G. Wood; Mr. F. J. A. Waring, Portsmouth; Mr. J. E. Webster, Upper Norwood; Mr. E. White, London; Mr. W. C. Worthington, Mr. James Worthington, Lowestoft; Mr. C. Willcox, Mr. R. Willcox, Portsmouth; Mr. J. H. Walters, Farringdon; Dr. C. J. Wright, Leeds; Mr. Blaker, Portslade; Mr. Barber, Sheffield; Mr. Campbell, Chigwell; Dr. Casson, Coleraine; Mr. Cheesewright, Rawmarsh; Mr. Crewe, Guernsey; Mr. Coles; Dr. John Curnow, London; Mr. Doherty, Ballymena; Mr. J. Drew, London; Mr. W. Folwell, London; Mr. H. Gwett, Northleach; Surgeon-Major Jepson; Dr. Hugh Miller, Birkenhead; Mr. Henry Power, London; Dr. M. L. Furnell, London; Mr. A. Pearce Gould, London.

Notes, Short Comments, and Answers to Correspondents.

HOW FEVER IS SPREAD IN RURAL DISTRICTS.

SOME months ago scarlet fever was imported into a rural district in a manner that thoroughly vindicates the necessity of a strict application of our sanitary laws. A woman living in a cottage near a railway station received the visit of a friend, who came from London with her child. After a few days' stay in the country, the London child was seized with scarlet fever, and its mother, anxious to be at home during the illness, did not scruple to travel back to town, though the child was covered with the eruption. She had, however, remained long enough in the village to sow the seeds of an epidemic. The children of the woman with whom she had been staying were the first to show signs of the fever; but this person, nevertheless, took them to a school feast. The vicar of the parish, however, discerned the true character of the rash, and at once ordered both mother and children off the premises. But this precaution was taken too late. Several of the school children contracted the fever, and the school had to be closed until the epidemic was over. The woman who travelled in the train with her sick child has been prosecuted by the local authorities, and pardoned with a caution; but her friend and host remains unmolested, though she was evidently the cause of spreading the disease in the school. At the present moment the neighbourhood is again threatened with another outbreak of scarlet fever. An inhabitant recently came to town, and attended the funeral of a child who died from scarlet fever; and, on his return, one of his own children contracted the disease. It would be interesting to know whether this is a new outbreak of the old epidemic, or whether the fever was carried from the London funeral. In all cases our rural authorities should impose the strict isolation of the patient, and in this respect as much can be down by moral suasion as by legal force. But for the epidemic the district might be accounted as one of the most healthy in England; for, on looking over the parish books, we ascertained that the average death-rate during the last ten years was a fraction under 13 per 1000 of the population.

Mr. W. E. Waters.—We are in accord with our correspondent in regard to many points touched in his interesting letter, but not on the main issue. Pressure on our space prevents publication.

Reformation.—Any legally qualified medical practitioner may be consulted in the case.

THE GUILDFORD URBAN SANITARY AUTHORITY.

NOT only have corporations a strange lack of conscience, but they exhibit extraordinary difficulty in adhering to any settled purpose on questions not at the moment in process of violent agitation. It is, therefore, necessary to see a project safe "through" before rejoicing in the triumph of success when fulfilment of a promise rests with a corporate authority. This is especially true of sanitary authorities, and we must confess to as strong a feeling of surprise as of regret when the promoters of any local reform allow their attention to be diverted from the business in hand before it is irrevocably accomplished. The experience of Guildford, Surrey, in respect to two matters of local interest may be instructive. The Urban Sanitary Authority of this town a while ago duly resolved to provide a hospital for infectious diseases. It has just rescinded the resolution, or shelved the question. The same authority took some steps to provide a site for public baths. It has now assumed an obstructive position in respect to this proposal. There is nothing very extraordinary in these acts of stultification. The same thing happens everywhere under similar circumstances. A sanitary authority should be regarded as a piece of administrative machinery capable of good work when duly moved. It is vain to expect the engine to move unless the steam is kept up. That anticipation implies a notion that corporations have within themselves the force of action. Any such conception would be opposed to the spirit of the age. It is the essence of self-government that authorities of all kinds are mere combining apparatus, which respond and give expression to the popular will. If the people of Guildford or any other community desire measures of public health to be enforced, they must take care that the policy recommended is enjoined. Naturally, authorities entrusted with the duty of providing for the well-being of a district devote a considerable part of their energy to the avoidance or evasion of plain duty. Rescinding resolutions for the public advantage seems to be the approved sequel of passing them. A vacillating policy is a policy of delay, and postponing a measure which would involve outlay is generally deemed an exploit of administrative sagacity. Who knows how long it may be before we have another epidemic after the small-pox has subsided? It may be six, eight, or twelve months! That being so, the Urban Sanitary Authority of Guildford can scarcely be expected to think of building a hospital for infectious diseases *at present!* Time to think of this when the danger threatens! As to the provision of baths, or a site (for that alone is needed), the question is clearly one of those matters which may be played with. The Guildford authority is not worse than other authorities. We question whether it is as bad. A corporation with due regard for the obligations of inertia would invent some presentable excuse for inaction, sheltered by which it might enjoy dignified repose. This particular authority has done nothing of the kind. It is only napping, not permanently asleep. It would scarcely surprise us to hear that a sense of its own absurdity had revived the spirit of progress.

ON CURRENT MEASUREMENTS IN ELECTRO-THERAPEUTICS.

To the Editor of THE LANCET.

SIR,—Mr. de Watteville, in his letter in to-day's LANCET, has, I am sure unintentionally, quite misquoted me. I never called to witness four physicians in support of my "sweeping" or of any other assertion. My assertions were made solely as the results of my own personal experience; but as this discussion was getting more diffuse and more theoretical every week, I thought those of your readers interested in the matter would do well to try and bring it to a practical issue, and I expressed my belief that it might be found that those physicians who not only prescribe electricity, but are themselves experienced in applying it—which, by the way, is a very different thing,—*very* seldom or never use a galvanometer. But perhaps it will answer the same purpose if Mr. de Watteville will favour us with the total number of patients electrised at University College Hospital during the past six months (*a*) by labile, (*b*) by stabile applications, specifying with how many of them a galvanometer was employed, and giving us in detail one or two typical cases, illustrating the advantages gained from its use, either to physician or patient, over the method advocated by me—viz., a comparison of the three factors: number of cells, effect upon operator, effect upon patient?

Electricity will be left in the hands of specialists, and necessarily do but a tithe of the good it is capable of effecting, until the mass of the profession can be induced to master the few preliminary details essential to its successful application; and I fear that the suggestions of your correspondents—suggestions which I continue to believe entirely without foundation—that there exist practical difficulties to its dosage, will tend to postpone rather than to accelerate its more extended use.

I am, Sir, your obedient servant,

Cavendish-square, W., May 5th, 1877. HERBERT TIBBITS.

"THE BOY WITH TWO STOMACHS."

THE good folks of Dundee have been much puzzled by the account of a monstrosity, which has been circulated by the local press as a "boy with two stomachs." Instead of the child possessing anything so remarkable, it would seem to have been only an ordinary case of congenital ventral hernia, and that the plurality of stomachs existed only in the imagination of the writer of the sensational paragraph.

SULPHUR SPRINGS AND BATHS.

To the Editor of THE LANCET.

SIR,—I shall be glad if any of your readers can inform me whether there are any natural hot sulphur springs in England; also, where sulphureous swimming-baths for ladies are to be found. Yours &c.,

May 6th, 1877. A MOTHER.

"THE BELLS."

SOME of our readers may remember the suffering depicted by Mr. Irving as he recalled the jingle of "bells" in the piece bearing that name at the Lyceum. Remorse made the music intolerable. In the character of *Mephistopheles*, Mr. Phelps was wont to emphasise the deprecatory exclamation, "What execrable taste some people have!" when the monotonous tones of church-bells fell on his unholy ear. This last-mentioned form of objection was no doubt highly reprehensible. Everybody probably ought to love the clanging invitation to prayer, though, as a matter of fact, to the majority of sensitive organisms it is provocative of thoughts and emotions the most uncongenial, more particularly when under shelter of an obsolete law it is inflicted on a neighbourhood at brief intervals throughout the day. There is, however, a new form of the nuisance of bells for which we are anxious to bespeak the consideration of some authority, if there be any, sufficiently powerful to afford relief. We allude to the ceaseless tinkle of those instruments of torture attached to the harness of horses drawing tramway-cars. The intensifying sound of bells approaching, repeated at very short intervals, is to the acutely sensitive organ of a sick person as distressing as the dropping of water on the head, that antique device of cruelty invented to inflict agony barely endurable. The excuse for this particular use of bells is a pretence of warning foot-passengers of the approach of fast-moving vehicles. Hansom cabs dash round corners unexpectedly, and no such jingle warns the unwary. Why should cars which never travel out of their known line be specially protected? These needless noises ought to be interdicted. One-half the din and rattle of the streets might be prevented if some administrative authority could be induced to look at the matter from a practical point of view, and instruct the police to prevent unnecessary addition to the sum of tumult.

Mercer.—We are obliged for the suggestion, but fear it would be impracticable.

CASE OF STONES (PHOSPHATIC) IN THE BLADDER.

To the Editor of THE LANCET.

SIR,—On March 7th, 1872, M. S——, single, came to me suffering from symptoms of stone in the bladder of recent date. After a short time she passed a small calculus, phosphatic in character, conical in shape, and having a hair coming out of the apex of the stone. Since then, at tolerably regular intervals of time, she has passed a stone, all more or less of the same shape, differing in size and similar in character, and having a hair coming from each, until the number reaches 157, and the weight 5 drachms and 53 grains. Her health has been good up to Jan. 19th, 1877, when pain (always present when a stone was passing) became very severe, and her urine frequently stopped in passing. I examined her, and found a stone, and went to the house next Sunday to remove it by dilatation. She was put under chloroform by my partner (Mr. Birch), and upon examining the bladder with a sound, no stone could be found either by Mr. Birch, Mr. Hickman, or myself, although we examined the bladder thoroughly. A few days afterwards a stone came into the upper portion of the urethra, causing so much agony that it had to be removed with the forceps. From January she has been suffering from cystitis. In all probability the hair is the cause of the mischief; but whether the hair is of abnormal growth in the bladder, or has been pushed up the urethra during a course of five years, I know not, and have no reason to suspect the patient of such a mode of procedure.

Some of your readers may perhaps throw some light upon the case.

I am, Sir, yours truly,

Newbury, May, 1877. F. E. EVOTT, M.D., F.R.C.S.

CRUVEILHIER'S DISEASE.

AT a meeting of the Medical Society of the College of Physicians, Ireland, held last week, Dr. Hayden exhibited a patient, aged twenty, suffering from progressive muscular atrophy. Both arms and thighs were affected, the calves being well developed and also the forearms. Fibrillary contractions were present in the thighs, but not in the arms. The scapulæ were prominent, and the thoracic muscles wasted in an extreme degree. The contrast between the calves and thighs and between the forearms and arms of this patient was most remarkable.

Mr. Field.—The abstract will suffice.

"DISPENSARY FOR SAILORS."

To the Editor of THE LANCET.

SIR,—As full replies to the questions contained in Dr. Spalding's letter, which appeared in THE LANCET of last Saturday, would have occupied too much of your space, I have thought it better to send him a letter giving all the information he asks. My colleague, Dr. A. Bernard, and myself, shall have great pleasure in giving every information to such other gentlemen as may require it.

As this dispensary has not been quite three months in existence, it would be premature to say more than this—that it has fully answered our expectations.

I am, Sir, yours faithfully,

Seamen's Dispensary, 9, Custom-house Arcade, Liverpool, May 8th, 1877. FRED. W. LOWNDES.

C. F.—The titles in question are not illegal, neither are they inconsistent with the qualifications. Owing to the fact that the word "physician," until of late years, used to imply a consultant, the word is liable to objection as conveying a wrong impression; but the new and free use of it by licentiates of Colleges of Physicians will soon correct this.

W. R., (Uxbridge.)—1. A fortnight.—2. It is highly desirable that the infected clothing should be destroyed. Failing this, they should be thoroughly fumigated in an oven.

G. H.—It is usual to supply medicine for the period over which the arrangement extends without making an additional charge.

POOR-LAW RELIEF TO THE SICK.

Vice-Chairman of a Board of Guardians complains that we do not realise the difficulty of dealing with paupers who are sick or pretend to be, and throw themselves on the rates. Nevertheless, we insist it is penny-wise and pound-foolish to stint "medical relief." If the measures employed for the cure of the sick be liberal, the work done will be good, the really disabled will be cured quickly and completely, while malingerers will be detected and may be punished. The only way to deal effectually with this difficulty is to grapple with it at close quarters. The hackneyed device of giving "as little as possible" has been tried, and it is a miserable failure. An examination of the "permanent sick list," and that equally burdensome list, the habitual sick, in any district would show that the majority of "cases" relieved is formed by paupers who are always ailing, because never adequately treated. It is strange intelligent guardians do not occasionally go through their books with a view to get at the root of the evil. This is the only way of ascertaining the facts. If an inquiry of the nature suggested were instituted, the folly of a parsimonious system of medical relief would be made apparent. In the absence of any real knowledge of the truth, it is scarcely surprising that men undertaking administrative duty with good intentions "fall into the groove," and end by becoming martinets of a system which has always borne bad fruit, and must continue to do so until it is reformed.

D. M. R.—We think our correspondent would be well served by either of the firms mentioned.

TWIN LABOUR: HEAD PRESENTATIONS.

To the Editor of THE LANCET.

SIR,—In your to-day's impression is a letter from Mr. Tompsett, describing a case of twin labour, in which the heads of both children presented, and he asks "whether a similar case of *two* heads presenting in a twin labour has been before observed." In answer to this query I beg to offer the following particulars.

In my own practice during the last five years I have had three cases of twin labour in which the heads of both children presented. In each case there was a common placenta, and five out of the six children were living. The interval between the births was in two cases twenty minutes, and in the others fifty minutes. In neither case was it necessary to give assistance.

Dr. Barnes, in his published Lectures, says: "In the more ordinary and favourable course of twin labour, the first child presents by the head, and is entirely expelled before any part of the second becomes engaged in the pelvis. Indeed the membranes of the second do not burst until after the first is wholly born. This second child presents either by the feet or breech, or by the head."

In Churchill's Midwifery, p. 483, fifth edition, are some statistics of the various presentations in twin labours. From these it appears that out of 562 twin labours, the heads of both children presented in 259 cases, or rather more than one-half.

The cases, therefore, of presentations of both heads are by no means rare.

Whilst writing upon the subject of twin labour, I should like, if my letter is not too long, to add the details of two cases, which, although by no means unique, are so infrequently met with as to be interesting.

Mrs. H. L——, in her fourth labour, was delivered of female living twins on the 20th of April, 1873. The first presented by the head, the second after an interval of fifteen minutes by the feet. There was only one placenta, and this was cast off and extruded prior to the birth of the second child. There was no hæmorrhage. The expulsion of the common placenta before the birth of the second *living* child has, I believe, been met with very rarely.

The second case I should like to record is remarkable from the entire absence of pain.

Mrs. G——, aged twenty-seven, in her first labour was delivered of premature dead female twins on the 29th of October, 1876. The first presented by the head, and after an interval of three hours the second by the right side of the thorax, which necessitated turning. There was, of course, the usual uterine contractions, but these were absolutely painless, the only suffering experienced being that caused by the introduction of the hand for the purpose of turning.

The mothers did well in all the cases.

I am, Sir, yours obediently,
Kennington-park-road, May 5th, 1877. A. CUMMINGS AIR.

To the Editor of THE LANCET.

SIR,—Perhaps the case I am about to record may answer Mr. Tompsett's question, whether "a similar case of two heads presenting in a twin labour has been before observed."

I was summoned by the husband of M. G——, at 9 P.M., on a Saturday evening in November last, about two miles distant, to see his wife in labour. On returning with him and examining the woman, I found the vertex presenting, the os dilated to the size of a florin, but still no severe pain. She was in good spirits and cheerful, and I remained with her all night. After giving her a full dose of opium, I left her at 8 A.M. on the Sunday in charge of a nurse in whom I had perfect confidence, promising to return in an hour or two. At 10 A.M. the husband again came for me, saying a child had been born dead. I returned with him, and on making an examination I found the vertex of another child presenting; but still the woman was cheerful and lively. Having some patients to see two miles distant, I left her, and visited her again in three hours, when I found her sitting by the fire, perfectly composed, and she wanted "nothing done." I thought, as she was still free from pain, pulse good, and no bad symptoms threatening, I would see what nature would do for her. I went home, and at 9 P.M. I was again sent for, and before I arrived the other fœtus was born, and that also dead. About an hour after the second child was born I attempted to remove the placenta; but this proceeding seemed likely to bring on so much hæmorrhage that I desisted for some time, when I again made the attempt, with the like result. Under these circumstances I summoned my partner, who with great difficulty removed it, the woman becoming very prostrate. I may say that during the time I was with her I inquired if she had met with any accident or over-exerted herself. She told me she had not. On questioning her more closely, however, she admitted that three or four days previously she had fallen down the cellar-steps, and no doubt this was the cause of the death of the children, as they were both well nourished. Eventually she did remarkably well.

I am, Sir, yours truly,
Alderley Edge, Manchester, May, 1877. E. CREW.

To the Editor of THE LANCET.

SIR,—In answer to Mr. Tompsett's letter in your last issue, on "Twin Labour, Head Presentations," the following case may be interesting.

On the evening of April 29th, 1875, I was called in to attend Mrs. O——, in labour with her first child, and was told that she had had uterine pains, accompanied by almost constant vomiting since the previous morning. The os was dilated to almost the size of a crown-piece; but as the head was above the brim of the pelvis, and the pains irregular and insufficient, I did not stay with the patient. About 1 A.M. I was again sent for, and found the vomiting had increased in severity, and excessive retchings accompanied each pain. At 6 A.M., as the head, which was presenting in the left occipito-anterior position, was making no progress, and the woman was becoming exhausted, I delivered with Simpson's short forceps, and now found there was a second child. On rupturing the membranes, a head again presented in the same position as that of the first child. I now gave a full dose of ergot, which, however, was not retained; and as nature seemed incapable of effecting delivery unaided, at 8 A.M. I again applied the forceps, and delivered her of a second strong male child. Considerable hæmorrhage followed the expulsion of a large single placenta, which was suppressed by the usual means. The mother subsequently had symptoms of puerperal fever, brought on by injudicious feeding; but she eventually recovered.

Yours faithfully,
Seaham, May 7th, 1877. T. C. BEATTY, JUN., L.R.C.P., &c.

To the Editor of THE LANCET.

SIR,—It may be interesting to your correspondent, Mr. Tompsett, of Jamaica, to know that a fortnight ago I attended a primipara with twins (two living males), both of which presented *cranially*. There were two amniotic sacs, and separate placentæ. The labour was in every respect natural and easy, though the children were larger than twins usually are at full birth.

Yours respectfully,
Goswell-road, E.C., May 7th, 1877. JOHN B. CARKIR, M.D. Univ. Glas.

*** We have received several other communications to the same effect, and the point is sufficiently elucidated.—ED. L.

THE ARTS AND SCIENCES IN ANCIENT ASSYRIA.

A LATE number of the *American Journal of Pharmacy* states that from the library of Sardanapalus, King of Assyria (discovered by our countryman, Mr. Layard, at Nineveh), it is evident that the Assyrians, some 3000 years ago, had a system of weights and measures almost as methodical as the present French metrical system, all the units of surface, volume, and weight being derived from a single linear unit. The base of the system was the cubit (equal to 20·67 of our inches). The cubit multiplied by 360 gave the stadium—a measure for great distances. The fundamental unit of surface was the square foot (foot equal to three-fifths of the cubit). The cubic foot constituted the metrata (bushel), which, with its subdivisions, was the standard of all measures of capacity. A metrata of water was the talent, the unit of all measures of weight. The sixtieth part of the metrata gave the mine, and this divided into sixty parts, the drachm. The weight of the metrata was about 70 avoirdupois pounds, the mine about 1·170 ounces, and the drachm about 159 grains. The sexagesimal system, which seems to have been used in all these calculations, combines the advantages of the decimal and the duodecimal systems.

Mr. James Barr, (Liverpool.)—Soon.

FLOWERS FOR HOSPITALS.

To the Editor of THE LANCET.

SIR,—I venture to request you will place the name of this institution before the lady whose offer to assist in securing a supply of fresh flowers for hospitals you mention in to-day's LANCET. Our wards for in-patients, now undergoing repairs, will be re-opened about the 1st of June. I may say that the ladies of the Flower Mission most kindly pay us occasional visits, but we can well do with a much larger supply.

Your obedient servant,
C. LOWTHER KEMP, Secretary.
Royal Hospital for Diseases of the Chest,
City-road, E.C., May 8th, 1877.

EDUCATION AND CARE OF IDIOTS.

WE are requested to state that on Thursday, the 17th, at 2 P.M., at Whitehall, the President of the Local Government Board and the Chairman of the Commissioners in Lunacy will receive a deputation to present the Report of the Special Committee convened by the Charity Organisation Society on the Education and Care of Idiots, Imbeciles, and Harmless Lunatics. The Report recommends that persons of this unfortunate class should be treated separately from acute cases of lunacy, and should all be suitably trained in childhood and youth, whereby the larger number may be made wholly or partly self-supporting, and the cases permanently placed in asylums confined to those requiring constant medical care.

E. J. S.—Application should be made to the Agent-General of the respective Colonial Governments. The remuneration is so much per head for each emigrant, 10*s.* and 5*s.* Possessio of a registered British qualification is necessary.

GAS IN THE RIGHT VENTRICLE OF THE HEART.

AT a recent meeting of the New York Pathological Society, Dr. Janeway showed a specimen of a heart obtained from a patient who had died suddenly with the following history:—The woman entered the Bellevue Hospital in January, suffering from pelvic peritonitis. Subsequently she had an attack of pleuro-pneumonia, terminating in empyema. The chest was opened, and the pus washed out, and two days after the operation the patient, after having had the cavity again washed out, died suddenly. At the autopsy, the right ventricle was found distended with gas, which on puncture escaped with a noise which showed it to have been under pressure. There was no air either in the left auricle or left ventricle. There was a clot in the right ventricle, but no frothy or fluid blood. An examination of the veins and arteries did not give any evidence of the admission of the air through them. There was no sign of the decomposition either in the blood or any of the viscera. Dr. Janeway could give no other explanation of the appearance of the gas than its sudden evolution from the blood.

CINCHONA ALKALOIDS.

To the Editor of THE LANCET.

SIR,—We believe the so-called mixed chinchona alkaloids prepared in India will prove as great a failure if tried here as they have already there. The reason of this is not far to seek, as it lies in the crude state of the product. Moreover, this has not the advantage in price as compared with other alkaloids that your paragraph points to. The sulphate of chinchonidine, for instance, is at present about one-fifth the price of quinine.

Yours truly,

Stratford, E., May 4th, 1877. HAVARDS AND SONS.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. J. Pollock, London; Mr. Macnamara, London; Dr. Aveling; Dr. Dyce Duckworth, London; Dr. Lloyd Roberts; Dr. Beach, Clapton; Messrs. Barton & Co., West Drayton; Dr. Edwards, Llanfachreth; Mr. Strickland, Portsmouth; Mr. Crew, Alderley Edge; Mr. Doran, London; Dr. Durant, Sandown; Dr. Beatty, jun., Sesham; Mr. Holmested, Hyderabad; Mr. Gaine, Bath; Mr. Redmond, Gateshead; Mr. Carpenter, Bradford; Mr. P. De La Sala, London; Mr. Loch, London; Mr. Picken, Randalstown; Mr. Tiffen, Folkestone; Mr. Murray, Forfar; Mr. Casson, London; Dr. Fleetwood, Aintree; Dr. Byott, Newbury; Dr. Lloyd, London; Mr. Mole, London; Mr. Powdrell, London; Mr. Rugg, Clapham; Mr. E. White, London; Mr. Bellamy, London; Dr. Longhurst, London; Dr. Medlicott, Wells; Mr. E. Berry, London; Mr. Everard, London; Mr. Gibson, Edinburgh; Messrs. Boulton and Paul, Norwich; Mr. Kemp, London; Mr. Watson, Shorncliffe; Messrs. Havards and Sons, Stratford; Mr. Thin, Edinburgh; Mr. Holmes, Blackley; Mr. Gaylor, Derby; Mr. A. C. Air, Kennington; Mr. Dean, Derby; Mr. Caster, Lambeth; Dr. Daly, London; Mr. Pollard, Brompton; Mr. M'Lean, London; Mr. Startin, London; Mr. Barr, Liverpool; Mr. De'Ath, Buckingham; Mr. Giles, London; Dr. Nightingale, London; Messrs. Ellis and Co., London; Mr. Tyrrell, Dublin; Mr. Coo, Leeds; Dr. Gairdner, Glasgow; Dr. Caskie, London; Mr. F. A. Heath, London; Mr. Whitson, Glasgow; Dr. Tibbits, London; Mr. Brodell; Mr. White, Ashton-under-Lyne; Mr. Morrison; Dr. Griffiths, Dublin; Dr. Gorst, Liverpool; Mr. Johnson; Dr. Dickson, Baxton; Dr. O'Hara, Rantyglo; Mr. Annandale; Dr. Martin, Manchester; Mr. Page, Sydenham; Mr. Freeman; Mr. Gould; Mr. Harris; Dr. Barker, Aldershot; Mr. Holland; Mr. Banks, Liverpool; Mr. Collins; Mr. Cretin, Birkenhead; Mr. Halford; Mr. Clayton; Mr. Williams; Mr. Watterson, Leamington; Dr. Jeffery, Lowestoft; Mr. Brown, Tredegar; Dr. Cullough, Gortin; Mr. Hill; Dr. Murphy, Buttevant; Dr. Jackson; Dr. Thornton; Mr. Young; Dr. Vacher, Birkenhead; Mr. Smith; Mr. White, Barnsley; Dr. Lowndes, Liverpool; Mr. Waters; Mr. Davies; Dr. Pigeon, Seacroft; Mr. George; Dr. Reed; Dr. Forster, Market-Deeping; Mr. Kebbell, York; Mr. Fosbroke; Mr. Tomes, Caterham; Mr. Youlden; Mr. Hawkes; Mr. S. Biggs; X. Y. Z.; Reformation; A Mother; One Anxious to Qualify; C. P.; Murex; W. H.; C. L., Physician; P. H. E. H.; M.D.; Enquirer; E. J. S.; G. H.; A Professional; W. H., Birmingham; J. E.; D. M. R., A Non-Professional; W. T.; &c. &c.

LETTERS, *each with enclosure*, acknowledged from—Mr. Coleman, Armley; Miss Mackenzie, Oswestry; Mr. Denny, Stoke Newington; Mr. Eardley, Tunstall; Mr. Sergeant, London; Mr. Maclehose, Glasgow; Mr. Yond, London; Messrs. Southall and Co., Birmingham; Dr. Slade-King, Ilfracombe; Messrs. Grace, Bristol; Mr. Maclean, Tarbert; Mr. Rutherford; Mr. James; Mr. Syson, Folkestone; Dr. Allkin, Denton; Mr. R. Jones, Long Melford; Mr. Buckingham; Mr. Spencer; Mr. Hordley; Mr. Hall, Liverpool; Mr. Summers; Mr. Cooper; Mr. Bishop; Mr. Drew, Stow-in-the-Wold; Mr. Chinery, Lymington; Mr. Roocroft, Wigan; Mr. Baines, Eltham; Mr. Sinclair; Mr. Walker, Dudley; Mr. Bourchier; Dr. March, Bradford; Mr. Reynolds, Steeple-Bumpstead; Mr. Bond; Mr. Trenchard, Taunton; Mr. Mead, Falmouth; Dr. Joyce; W. J., Margate; Quero, London; V. S.; Medicus, Exeter; Delta, Newcastle-on-Tyne; B. C. H.; C. R., Notting-hill; E., Pickering; Z. X. B.; Delta, Leeds; J. H., Clapton; L.R.C.P.; Medicus, Shrewsbury; Assistantship; Alpha, St. Helens; M. B., Derby; Medicus, Hingham; J. T. P., Salisbury; M.D., Harrow-road; M.R.C.S.; Omega; X., Wolverhampton; M.D. Edinburgh; G. A.; J. W., Newcastle-on-Tyne.

Western Gazette, Bolton Evening News, Brighton Examiner, Templar, Tamworth Herald, Financial Opinion, Land and Water, Newcastle Daily Chronicle, Broad Arrow, Daily Post, Western Morning News, Manchester Guardian, and *Leeds Mercury* have been received.

METEOROLOGICAL READINGS

(Taken daily at 9 a.m. by Steward's Instruments)

THE LANCET OFFICE, MAY 10TH, 1877.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb.	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall	Remarks at 9 A.M.
May 4	30·10	E.	37	43	79	50	31	...	Fine
„ 5	29·91	E.	37	43	80	51	33	...	Cloudy
„ 6	29·83	S.E.	46	51	91	55	37	...	Fine
„ 7	29·81	E.	45	49	99	64	36	...	Cloudy
„ 8	29·77	E.	55	62	93	67	40	...	Fine
„ 9	29·54	S.W.	51	55	102	64	47	...	Cloudy
„ 10	29·59	W.	49	54	98	64	48	...	Cloudy

Medical Diary for the ensuing Week.

Monday, May 14.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, May 15.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Gladstone, "On the Chemistry of the Heavenly Bodies."
PATHOLOGICAL SOCIETY OF LONDON.—8½ P.M. Dr. Vandyke Carter: Memorandum on Leprous Nerve Disease. Mr. W. Haward: Cystic Disease of Testicle. Mr. Spencer Watson: Melanotic Sarcoma of Choroid. Mr. Butlin: Chondroma of Submaxillary Gland. Mr. L. Browne: Cancer of Larynx. Mr. M. Baker: Pericæcal Omental Hernia; Case of Morphine (living specimen). Dr. Gowers: Specimens showing the state of the Nerve Centres in Hydrophobia. Dr. F. Taylor: Lymphoma of the Intestines. And other Specimens by the President, Mr. Wagstaffe, Mr. Godlee, Mr. Nunn, and Drs. Lyell, Crisp, Dunbar, and Goodhart.—Dr. Gowers' Microscopical Specimens will be on view at 8 P.M.

Wednesday, May 16.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, May 17.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 3 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 3 P.M., and on Friday at the same hour.
ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Heat."
HARVEIAN SOCIETY.—8 P.M. Clinical and Pathological Evening.

Friday, May 18

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 3 P.M.
MEDICAL MICROSCOPICAL SOCIETY.—8 P.M.
ROYAL INSTITUTION.—9 P.M. Lieut.-Gen. Richard Strachey, "On the Physical Causes of Indian Famines."

Saturday, May 19.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. W. H. Pollock, "On Modern French Poetry."

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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Agent for the Advertising Department in France—
Mons. DE LOMINIE, 30a, Rue Grenelle St. Germain, Paris.